The Journal of

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VOL. 27 MARCH, 1952 No. 2

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References: Angiology, (Feb.) 1952 . . 1. Winsor, T. and Humphreys, P., p.1. 2. Perlman, A., p.16. 3. Samuels, S. S. and Padernacht, E. D., p.20.

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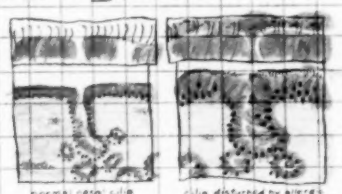
1. Fabricant, N.D., and Van Alyea, O.E. Am. J. Med. Sc. 205:122, 1943.



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2. Tippin, E. E. Arizona Medicine 7:38, 1950.

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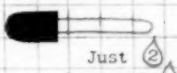

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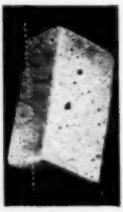
"Plastic Sponge Which Acts As A Framework For Living Tissue," by John H. Grindlay, M.D., and John M. Waugh, M.D., Rochester, Minn. *A.M.A. Archives of Surgery, 63,* 3, Sept. 1951.



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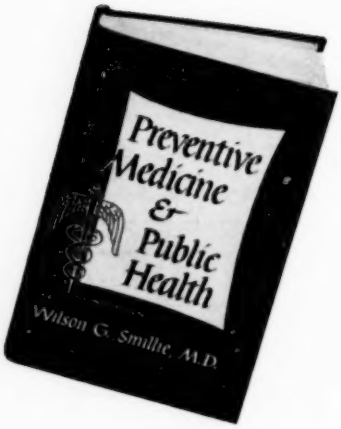

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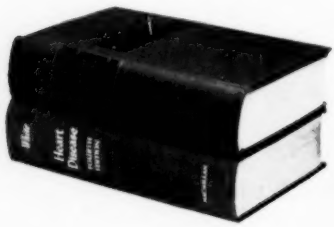

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The Journal of MEDICAL EDUCATION

Vol 27 No. 2 March, 1952

Corporation Philanthropy and Higher Education

John D. Millett*

The American economy is based upon the idea that a free enterprise system encourages maximum progress. But free enterprise is possible only in a free society. The chief guardians of the free society are those educational institutions which pursue "the glimpse of truth wherever it may lead." If the business community truly believes in free enterprise, then contributions to institutions of higher education are a part of sound corporate investment policy.

The problems of corporation philanthropy are far-reaching and complicated. But most of these can be conveniently discussed under two principal headings: first, what should be the role of corporations in supporting philanthropic activities in the United States; and second, how much and by what machinery shall corporations contribute to philanthropic purposes.

I shall forego any attempt here to deal with the broad issues of corporation policy on philanthropic contributions. We might well spend an entire evening simply thrashing out the various aspects of this question, including corporation obligations, moral and legal, to its stockholders and corporation responsibility as citizens in a free society. Our Commission has on several occasions discussed these matters with representative officials of American corporate enterprise, and we appreciate the many problems which confront the business executive in formulating a policy on philanthropic giving.

Rather, it seems to me that we might more profitably address our consideration for a few minutes to the second group of issues of major concern to corporations today — how much and by what machinery are corporations to contribute to philanthropic purposes.

Corporation Gifts Increasing

For the obvious fact is that corporations are now making sizeable contributions for various purposes and may well increase these amounts in the next few years. It matters not that the inspiration for much of this giving finds its source less in the pangs of sweet charity than in the individual satisfaction of reducing the tax bill. Corporations nonetheless give, more and more persons are expecting these gifts to grow, and the future of many different types of activity depends upon these contributions.

I am encouraged to discuss exclusively this second problem of ways and means because on several occasions recently our

* Executive Director, Commission on Financing Higher Education. From a talk to the Educational Advisory Committee, National Association of Manufacturers, Oct. 29, 1951.

Commission has been asked to give concrete suggestions about how corporations might contribute to higher education and about the desirable magnitude of such gifts. One corporation executive told me recently that while he still had reservations about the matter, his corporation was going to give more money to philanthropy than in the past, and he wanted advice about how to proceed in the field of higher education. If these remarks of mine accordingly can have some possible usefulness as a general guide, they will serve their purpose.

Since 1936 the Federal Bureau of Internal Revenue has reported the volume of deductible contributions by corporations as shown on income tax returns. The amount of these contributions between 1936 and 1948 fluctuated from $27 million to $266 million. As a proportion of net taxable income before payment of the corporate income tax, these contributions have varied from .3% to a little over 1%.

This spring the Russell Sage Foundation sent a questionnaire on corporation philanthropy to a large number of industrial companies. Replies were received from some 326 different companies, some large, some small. While the results may have been biased by the voluntary nature of the response and by the exclusion of some types of business enterprise who may give generously, the results of this survey constitute the best available information today about the volume and incidence of corporation philanthropy. Thanks to the courtesy of the Russell Sage Foundation, I am able to cite the principal results of this study.

The 326 companies responding to the Russell Sage questionnaire had a net taxable income of $1.3 billion in the calendar year 1950. Their total contributions, plus business expenditures involving payments to health, welfare, and educational institutions, amounted only to $6,790,000. This total was just .5% of net taxable income.

Percentagewise, the Russell Sage Foundation study found that this nearly $7 million in corporate gifts was distributed as follows:

		Per Cent of Total Contributions
1. Welfare Agencies		44.3
a. Community chests	36.2	
b. Other agencies	8.1	
2. Health Agencies		26.6
a. Hospitals	14.8	
b. National health agencies (polio, cancer, Red Cross, etc.)	10.2	
c. Other health agencies	1.6	
3. Education		21.2
a. Scholarships & fellowships	2.8	
b. Research in colleges	6.2	
c. Institutional aid	7.7	
d. Agencies supporting the "American way"	4.5	
4. Religious Agencies (Salvation Army, Y.M.C.A.)		4.1
5. Miscellaneous		3.8
		100.0

If total corporation profits before taxes in 1950 were $40 billion or over, and if all corporation contributions amounted only to .5%, then about $200 million was contributed to welfare, health, and educational institutions in that year.

We may well find when the full statistics are published by the federal government two or three years from now that corporation contributions were somewhat larger than this in 1950. In 1948, the last year for which the complete data are now available, corporation deductions for charitable contributions came to .7% of taxable income. Certainly in the aggregate the present magnitude of corporation philanthropy is well under 1% of net taxable income.

Reasonable Goal: 3% of Net Taxable Income

Obviously, the first question then in any discussion of the practical aspects of corporation philanthropy must be: is it reasonable to expect that this total volume of contributions might be increased? I do not need to remind you that Federal corporation income tax law now permits up to 5% of net taxable income to be deducted for philanthropic gifts before calculation of the tax. Many no doubt would be willing to argue that the goal of corporation philanthropy should be this full 5%. I doubt if this is reasonable or feasible. I should be happy to settle for 3%, because this would mean contributions 4 to 6 times greater than the present average, because this would still be well within the existing tax limit, because this would deprive stockholders of only a small part of corporation earnings, and because this perhaps would not involve a sufficiently large curtailment in tax income to excite government demands for reduction or elimination of the 5% provision. I believe it might well be an immediate and practical goal in these days to encourage corporations to set their sights upon 3% of net taxable income as the desirable magnitude of their philanthropic contributions.

Any such percentage would mean a sizeable increase indeed for most businesses. In the present year a 3% goal would mean total corporation philanthropy in the neighborhood of $1.3 billion—no small sum indeed.

The second question then is how should $1.3 billion in gifts be divided among various purposes. I believe the answer is suggested by the statistics which I have already cited.

Probable Distribution of Gifts

About 50% of all corporation philanthropy may well be expected to go to welfare agencies such as community chests, the Red Cross, the Salvation Army, and similar groups operating in those communities where a corporation has substantial interests. Then, some 25% of all contributions might be disbursed to health agencies such as local hospitals and the various foundations and societies for the promotion of medical research and improved medical care to our citizens. Let me add right now a special word on behalf of the National Fund for Medical Education. There is little point in many different agencies promoting medical research if they are not prepared at the same time to support basic medical education. And lastly, I should like to think that corporations will find it in their best interests to give around 25% of their philanthropic contributions to higher education.

Accordingly, if corporations contributed about $1.3 billion in philanthropic gifts, we might reasonably expect $650 million to go to welfare activities, $325 million to go to health agencies, and $325 million to go to educational activities.

Let us look for a few moments to see how gifts of this magnitude would affect the present financing of higher education in this country. In the academic year 1950, the last year for which we have complete information, the accredited colleges and universities and various junior colleges had total educational expenditures amounting to about $1.3 billion. This excludes the operating costs of hospitals attached to medical schools and of farms attached to agricultural schools. Of this total, about $700 million was spent by public institutions,

which means primarily by state universities and state professional schools, and about $600 million was expended by private institutions, primarily by private universities and private liberal arts colleges.

For our purposes here, I should like to concentrate attention upon the private colleges and universities. In doing so, I am not suggesting that philanthropy is exclusively concerned with private institutions, or that public institutions do not need and welcome private gifts. I narrow our concern simply because private institutions traditionally have depended more extensively upon philanthropic support, both for current operating income and for capital plant.

This $600 million of current educational expenditure by private institutions in 1950 came from four major sources. Nearly 65%, almost two-thirds, was provided by student tuition charges. A little over 13% was provided by endowment income. Some 12% came from philanthropic gifts, obtained from alumni, church bodies, private foundations, corporations, and others. The final 10% of educational income was obtained from the Federal government as payment for the performance of research contracts.

Private colleges and universities in 1950 received about $72 million as current gifts. We have no exact information to indicate how much of this $72 million was contributed by corporations, but our best estimate would be something like $10 million at the most. If all corporations in 1951 were to make philanthropic contributions amounting to 3% of net taxable income, and if 25% of this were to go to educational purposes, then I would estimate that the private institutions would have received nearly $200 million in corporation gifts.

Now $200 million of educational income would be sizeable indeed for our private institutions. It would be about one-third of present levels of income. It would provide a major part of the additional income so sorely needed in higher education.

If we are to continue to have a dual system of higher education with both public and private institutions of about equal strength, more private income is imperative. Preferably, this income is desired from a number of sources. A variety of income means less likelihood that any one group in our society can dominate our colleges and universities. And I would argue that freedom of educational institutions is an essential element of a free society.

Corporation contributions cannot eliminate the necessity for student fees or the willingness of private institutions to accept government contracts. These will continue. But corporation contributions can lessen the need to rely increasingly on one or the other of these two sources of income and can help promote that diversity of income which makes the difference between free and controlled institutions of higher education.

Let us turn to a third major question. Granted that corporations might set as a general goal philanthropic contributions amounting to at least 3% of net taxable income, and granted that as much as 25% of these total contributions might go to higher education, what are the practical methods whereby the willing corporation can give to the more than 1,000 institutions of collegiate grade in this country?

Let me begin a possible response to this question by saying at once that

there is no one method of channeling corporation contributions to higher education. I am glad this is so. Instead, every corporation has a variety of possibilities from which it may select any one or combination of methods as it sees fit. At the same time the variety of choice is today being narrowed within practicable and manageable limits.

Five Choices for Channeling Funds

Essentially, it seems to me that there are five broad types of choice which a corporation has in channeling funds to institutions of higher education:

1. Grants for promotion of basic research
2. Fellowship awards for the training of specialized personnel
3. Scholarship awards for broad undergraduate education
4. General operating or capital grants based upon
   a. Common location of business and institution in a community
   b. Common interest in the advancement, let us say, of business education, engineering education, or medical education
   c. General interest, such as improvement of race relations and educational opportunities for Negroes
5. Compensation for special services rendered, such as institutes for discussion of professional problems in banking, journalism, labor relations and other fields where the persons benefitting from the service are the present employees of the corporation.

I have outlined these five broad possibilities because they represent the types of contributions which are now made by business corporations to institutions of higher education. I should like to say a few words of explanation about each.

Research

Many corporations are now supporting research activities at various universities. There is no need for me to say anything about the importance of this work. I would emphasize several factors: this support is vital to the continued research activities of universities; the support should encourage broad lines of investigation; grants should cover overhead costs as well as direct costs. There are some industries which do more than others to support research in their broad fields of interest, so that there is still room for further development. I assume, moreover, that corporations will support research at both public and private universities, wherever there are competent men and facilities available. Many corporations regard this research support as a legitimate business expense and so report it, but from the point of view of the university this support is vital gift income for the furtherance of its educational activities.

Fellowship Programs and Scholarship Programs

Many fellowship programs are an outgrowth of the research interests of corporations. They recognize that the continued growth of our basic knowledge and our technology in many fields depends upon competent, highly trained personnel, and these fellowship awards to advanced, graduate students are of real usefulness. But they help persons, not institutions! These expenditures do not provide real financial assistance to a university unless they are supplemented by an educational grant to the institution. It costs a university usually three to four times the amount of the tuition charge in order to educate a graduate student in the physical and biological sciences. We hope more corporations will come to recognize this fact.

Scholarship programs likewise provide financial assistance primarily to individuals. They do help provide assurance to a college or university that its fee charges have not closed its doors to promising talent of meager economic resources.

Most business corporations tend to confine scholarship awards to the children of their employees, although some, such as those previously awarded by Pepsi Cola and those now given by Sears Roebuck, are broader in scope. I wish especially to call your attention to the scholarship program of the Ford Motor Company. The individual recipient selects any college or university he wishes to attend, public or private. But if he goes to a private institution, the Ford Motor Company Fund makes a gift of $500 to that institution over and above the tuition charge paid by the scholar. This makes the program one of real financial assistance to private colleges and universities without burdening the company with selection of the institution. Interestingly enough, among the first 70 scholarships awarded, exactly 35 persons elected to attend public institutions and 35 selected private institutions.

Let me repeat, because the point is so important. Unless a scholarship or fellowship program of a corporation is accompanied by an operating grant to a college or university, the corporation has helped the individual student but has not directly helped the institution. Indirectly, as I said, the institution is helped, because it can depend more readily upon student fees if it knows that others are helping promising students to meet the costs of college attendance.

Operative Grants

Actually, many corporations and other business concerns have long been accustomed to making operating or capital grants to colleges and universities in which they have a general interest. This general interest is not based upon caprice or the whim of some business executive. It is grounded upon well-recognized mutual interest. When a college or university and a business are located in the same community, they share a common concern with the educational service available in that community. Financial assistance from the corporation to the institution of higher education is a natural consequence.

At present, this sense of community interest is being broadened beyond the limits of a single city or county to embrace a whole state. Liberal arts colleges are commonly located in small towns where there may be no large businesses. The residential character of these colleges is an important part of their educational program. Today, in states like Ohio, Michigan, Indiana, Minnesota, Illinois, Oregon, and in southern California, presidents of private liberal arts colleges are banding together to appeal for gifts to the major corporations doing business in these states. This is a promising development. Here again, the corporation executive avoids the problem of invidious selection among several institutions. He needs satisfy himself only that the basis of inclusion and exclusion from the joint appeal seems reasonable and that the formula of apportionment is equitable. One national corporation executive has told me that he expects to divide gifts for liberal arts colleges among several states by the proportion of retail sales in a particular state to total sales in the country.

Interests in Common

A corporation and a university or school may share common interests in promoting a particular kind of education, such as engineering education. In its recent successful campaign for new endowment, Massachusetts Institute of Technology raised over a third of its goal from corporation contributions. Many business concerns have contrib-

uted to the Harvard School of Business and similar schools. Pharmaceutical companies and many others have a first-hand interest in the state of medical education. Indeed, all business companies surely have a major interest in the health of our citizenry and the quality of the medical service available to them. Now, fortunately, the National Fund for Medical Education provides an equitable agency of distribution for corporation gifts to help finance the 72 four-year and 7 two-year medical schools in this country.

There is another kind of common interest which corporations may have with colleges—a concern for improving educational opportunities for Negroes with its consequent impact upon employee relations, available manpower, and community relations. In this field, there is already in existence another vehicle for the convenience of the interested donor, the United Negro College Fund. About one-third of its annual receipts now come from business corporations.

In all these different ways corporations are expressing a community of interests with institutions of higher education by providing general gifts for current operating or capital purposes.

Special Services

And then there are a variety of special services which colleges and universities may afford business corporations. In order to be consonant with its educational aims, a college or university confines these services to activities growing out of its regular program. The most common form of such activity is in-service training courses for corporation employees. Princeton University's seminars in labor relations are well-known. Rutgers University annually plays host to the Graduate School of Banking of the American Banking Association. There are many other examples in many different fields, from the conservation of lumbering and fishing resources to the collection and analysis of business statistics. American business usually meets all the costs of these special services; sometimes they may even go farther and make a general grant as well.

I believe this catalogues the major types of corporation contributions to higher education. Not all of these gifts and grants are necessarily philanthropic; many are legitimately classified as business expense. But all are important to the continued financial well-being of higher education.

There are today great opportunities for corporation philanthropy. Higher education does not look to business as its sole means of support but it does hope that the support it has had in the past will grow, and grow sizeably. The financial problem of higher education is to obtain more income in order to improve educational services and to meet the costs of inflation. More income is indispensable if we are to maintain and advance the intellectual resources of our society. Corporations can and do have an important part in this effort.

There is not and cannot be any basic antagonism between business and higher education in this country. Each is a different but essential manifestation of a free society. It is not the responsibility of corporations to maintain higher education, and it is not the responsibility of higher education to maintain business enterprise. But both must be devoted unfailingly to the maintenance of a free society. I cannot conceive of a free society without free institutions of higher education preserving the traditions of the open forum and pursuing the glimpse of

truth wherever it may lead. I cannot conceive of a free society without free business enterprise dedicated to the constant enlargement of our material prosperity through competing units of productive effort.

Today higher education asks only that the business community understand something of its essential role in its peculiar province, and help maintain the traditions of freedom in intellectual endeavor. In turn, higher education realizes its responsibility to help preserve the conditions of a free society—the only kind of society in which our kind of economy can function. In the cooperative contribution that each can make lies the best hope for the American tradition.

National Association of Manufacturers

Resolution on Support of Educational Institutions Adopted by Board of Directors October 30, 1951

The National Association of Manufacturers in its Resolution on Education, December 1948, called upon individuals, local and state governments and every business element of our economy to fulfill their responsibility by providing adequate support for the nation's whole educational program and urged individual businessmen to take responsibility in their own community for careful study and cooperation in connection with the courses of study, the adequacy of school facilities and the compensation of teachers.

Essential to the perpetuation of the American way of life is a system of education which includes both privately and publicly supported schools, colleges and universities. The privately supported institutions are in a critical financial plight. The public institutions, state and local, are likewise having serious financial difficulties.

Industry recognizes the essential contributions made by these institutions to the development of leadership to manage its increasingly complex operations, the contributions in both pure and applied scientific research, the investigations and study of pertinent phases of our life, and the development of social and civic competence of our citizenry.

Business enterprises must find a way to support the whole educational program effectively, regularly and *now*. In the light of the situation which faces American education, the *Educational Advisory Committee of the National Association of Manufacturers* recommends that the Board of Directors of the Association officially recognize this situation and use its influence to urge the membership of the National Association of Manufacturers:

1. To continue its efforts to secure adequate local, state and private support for a sound program of elementary and secondary education for all American youth.

2. To exert every effort to make available to higher education the supplementary private financial support essential to meet the educational needs of our youth, American industry and the nation. This private support may be in the form of:

   a. Endowments, grants-in-aid, buildings and such other items as may be determined.

   b. Assistance to qualified and worthy individuals to continue their educational careers through programs of scholarship awards and other grants for education.

   c. Utilization so far as possible of the facilities, faculty and staff of colleges and universities to carry on research in pure, applied and social science and in all other areas which will prove beneficial not only to industry but to American life.

   d. Assistance to demonstrably sound organizations whose funds are raised for and disbursed to urgently-needed fields of specialized education.

On December 20, 1951 the National Association of Manufacturers announced the unanimous adoption by its 160-member board of directors of a Resolution on Support of Educational Institutions which declared: *Business enterprises must find a way to support the whole educational program—effectively, regularly and now.*

—from "Industry's View", National Association of Manufacturers, 14 W. 49th St., New York 20, N. Y.

The National Fund for Medical Education

S. Sloan Colt*

Private voluntary support for medical education is vital for the preservation of academic freedom. To this end the Trustees of the National Fund seek $5,000,000 annually from private sources. Finding these new sources is a real challenge calling for the active assistance of all industry.

Three years ago a committee of business executives was brought together with leading educators to examine the serious financial predicament in which a great majority of the nation's medical schools found themselves. This committee, after carefully studying the situation, concluded that there was an urgent need by the medical schools for additional income. Simultaneously, a committee of distinguished university presidents reached the same conclusion.

The National Fund for Medical Education was formed as the outcome of these two studies. Its trustees were selected from among these two groups of representative men and women. We all agreed it essential to find new income to support the teaching budgets of the nation's 79 medical schools. The $64 question was: *Where to Find the Money?* Should this new support be raised privately or publicly?

Since the amount needed is large and since the demands and needs for medical care are universal, there are those who believe that Federal aid, supported by the tax dollar, offers a logical solution. Others believe private voluntary support in sufficient amount can be mobilized through an organization such as this National Fund. We believe that private voluntary support, free from ideological strings, is vital to the preservation of an atmosphere of academic freedom. We believe the painstaking sifting of scientific medical knowledge and the proper dissemination of the resulting findings can best be carried out by medical schools free from political influence and bureaucratic restrictions. I feel sure you will agree with our conclusion.

To this end, the Trustees of the Fund seek $5,000,000 of voluntary private support on an annual basis. If we succeed, and I am confident we shall, then there will be established a balance between private and public support should the latter be forthcoming in the future.

As a first step, we called on the medical profession. I can report an excellent arrangement has been made whereby the American Medical Education Foundation, sponsored by the American Medical Association, will undertake to raise a substantial sum each year from among the 200,000 doctors throughout the country. As a second step, the Trustees have turned to American corporate enterprise. I trust you share my conviction that private enterprise has a direct and vital interest in medical education, because it is at the core of the nation's welfare. We all know that good health

*President, National Fund for Medical Education. From an informal talk at a meeting of the Educational Advisory Committee, National Association of Manufacturers, October 29, 1951.

spells good business, lower unit costs, fair profits and healthy working conditions. Without the good health that comes with proper medical care, the nation's strength would be seriously impaired.

Medical Education and Industry

Many wonderful research projects are going forward in this country today. If we permit the medical schools to languish and to lower their teaching standards for lack of adequate support, these projects may well fail to yield the gains we are confident they hold in store. It requires competent doctors—very competent doctors—to administer and put to practical daily use the knowledge being so rapidly gained in the research laboratories. This, I believe, is the basic reason why medical education directly concerns industry and why industry will benefit by supporting it.

There is a further point to bear in mind. It is that the medical schools are the weakest link in the chain of university finances. Many of them have been draining the budgets of the universities under whose jurisdiction they operate. They have done so to the extent that they are gradually and surely weakening the entire financial structure of our great universities. I do not need to remind you that we depend upon these universities in large measure to train and develop the human resources essential to continued national progress.

As leaders of American enterprise you know by practical experience that prosperity flows from a vigorous development of our natural resources. I am convinced you are also aware of the direct benefits to be derived by a full development of our human resources. Supporting higher education is a practical way to acquire these benefits.

The Fund Thus Far

I am much encouraged by the start we have made in launching the Fund. Contributions totalling approximately $1,400,000 have been received. Forty per cent of these came from the medical profession. Sixty per cent came from corporations. This initial response justifies the faith the Trustees have placed in American enterprise and leads me to hope that corporations in increasing numbers will come forward in support of this effort. Already the Fund has distributed $1,132,500 in unrestricted grants for the maintenance of high teaching standards in the 79 medical schools of this country. The Fund needs the cooperation of all. The Trustees and I welcome advice and suggestions.

Because of my dealings as a banker with corporation executives over a number of years, I have come to know the ways of free enterprise. Needless to say, I'm all for it and know at first-hand the advantages of free and honest competition. I am also confident that industry can be relied upon to team up for the strengthening of the national community. The very fact that members of the National Association of Manufacturers have formed an Educational Advisory Committee is proof positive of this contention.

As I understand the NAM program, the Educational Advisory Committee was organized to find the best possible ways and means to strengthen and assist the nation's educational institutions. It is a case of enlightened self-interest and seems to me to be motivated by a high order of good corporate citizenship. Finding new sources of voluntary private support for medical education, on a national basis, is a real challenge calling for the active assistance of all.

The Doctor for Tomorrow's Needs

Robert Collier Page*

The attitude of the doctor of tomorrow will be allied to the spirit of the beloved family doctor. He will be a practitioner of 'constructive medicine', a scientist trained in considering man as a whole human being. He will understand man's physiology and psychology and he will know that changes in man have a way of reacting on his whole environment, and vice versa. The vitality of medical education rests with our ability to understand and transmit these concepts.

The ideal medical doctor of the future will be closer to the old-fashioned general practitioner than most of us realize. He will be the doctor whose intimate association with the family as a whole has fitted him for taking care of everything from delivery of a child through a diagnosis of grandmother's complaints.

He will be an exponent of preventive medicine and will have strong opinions on public health. His major concern will be to look upon a patient as a "whole human being.". He will try to understand what, to the layman, appears easy to understand; namely, normal health. And he will have a much keener interest in the teaching methods of his alma mater.

Because the past few years have produced millions of spoken and written words concerning the future of the nation's health and the future course the medical profession must take, it may be stated at the outset that the need for future medical planning at the teaching level is a subject requiring immediate determination by medical educators themselves, by the practicing physician and by the general public.

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It is universally agreed that the complexities of modern medical science have made the training through which the upcoming generation of medical practitioners must pass more painstaking and more costly.

We hear currently that the training of competent doctors and medical scientists is imperiled by the financial crisis in medical schools.[1] We hear also that if this condition is allowed to continue it will adversely affect the nation's health. Educators remark the potential dangers to academic freedom in the situation. Economists have gone on record to this effect. It is to the corporation, functioning as a pacemaker in finance, that medical and allied science would turn first to avert a crisis in the training of physicians, chemists and scientists.

To understand how the problem arose and how we may best attack it, we must go back forty years to the time when Abraham Flexner brought to light what he and others regarded as deficiencies in the medical education of those times.[2, 3]

In the years which followed, the training of doctors was put upon a "scientific" basis. As a result of this change, which took little consideration of changing economic forces, it has become extremely

difficult to finance medical education. Thus, many medical schools, particularly those which are privately operated, are in serious financial distress. Recently, for example, Doctor Lowell J. Reed, vice-president of Johns Hopkins, stated that an additional 40 million dollars annually would be required to maintain adequate progress, and a committee of twelve physicians and medical educators who made a two-year study of medical school grants and finances concurred.[4]

The committee's work, undertaken for the U.S. Surgeon General, resulted in a report issued by the Public Health Service[4] showing that 41% of the medical schools, or about 33 out of 79, have been forced to curtail one or more aspects of their teaching programs. These curtailments have more generally affected adversely the fields of public health and preventive medicine. Training in these areas has either been eliminated or curtailed in five schools. A number of others are now unable, because of financial limitations, to establish previously planned departments of preventive medicine.

One proposal has been that enrollment in the medical schools be increased 15%.[5] On the other hand it has been pointed out that 40% of the nation's physicians were in military service in the second World War, leaving 60% to care for the civilian population, and that, in this latter view,[6] an enrollment increase would result in a surplus of doctors by 1960.

Health Maintenance Is Essential

The armed services, and intelligent industry, make a strong point when they emphasize the importance of health maintenance. But our medical school teaching is primarily along curative lines. We know, of course, that education, research and wider distribution of services have expanded the horizon of medicine, and that infection has been brought under control. The research laboratory has provided the means and the physician has used them widely. Parenthetically, it ought to be noted that this very conquest of disease has posed the emerging problem of an aging population, with its corollary economic and social questions; in short, the major problem of geriatrics.

Today, as we build up our armed forces and put more and more doctors into uniform we cannot escape the fact that most of these men, field surgeons excepted, have only a casual interest in routine medical military service. And it *is* routine, for the armed services are concerned with the healthy man and woman and the maintenance of that health. In this respect, the medical needs of the armed forces and industry have much in common. The ill soldier is of little use in combat. Likewise, in industry the ailing employee lessens rather than increases production. Industrial management, like the general in the field, is only interested in the healthy individual.

There is much that the medical schools could do to alleviate this need. *If* the medical schools are forced to step up their production line to a three-year schedule, it would be fitting for the underlying theme of this teaching to be "Normal Health and How Best Can It Be Maintained?"

Two acknowledgeable benefits to all parties concerned would automatically follow. The young doctor would be trained to cope with the immediate needs of military medical service. He would be happy in his assignment of health maintenance in contradistinction to the doctor in World War II who was constantly on the alert for diseases which

were never found. The general morale of both the G. I. and the Army doctor would be high. There would be less need or occasion for the soldier to seek advice and guidance across the drug store counter, a practice of ever-increasing momentum and magnitude in the United States today. This situation is rarely discussed at the teaching level of medical education. It is a known fact that some pharmaceutical houses devote a considerable amount of time and effort to ways and means of selling drugs across the drug store counter without prescription. How many millions of dollars are spent in this way each year by the unsuspecting or ignorant citizen has never been recorded. A practical program of health education with emphasis upon "normal health" would do much to offset this deplorable situation.

At medical school the emphasis today is placed on an accurate diagnostic approach and the application of drugs for therapy. The years pass and private practice increases for the average doctor. Time becomes more pressing, and the pressure seems to justify a greater exercise of the art of symptomatic therapy, an art which is given a tremendous lift by the many pharmaceutical houses through their instructive, handsome, illustrative literature which, in too many instances, wields a magnetic spell over many physicians.

What are the medical schools doing to overcome this acknowledgeable defect in the training of the doctor for tomorrow's needs? Fewer departments of preventive medicine surely cannot be considered a step in the right direction.

Have the medical educators decided that the medical teaching of today is fitting the doctor for the medical needs of tomorrow?

Specialty Training Only After Practice

The pre-clinical years of medical teaching are an ideal time to instill facts and concepts of health maintenance in the mind of the doctor of tomorrow. If the foregoing line of reasoning be accepted, it is certainly one plausible approach to the crying need for better medical care for the public at large. After several years of Army service the young doctor would be well on the road to being "the fine general practitioner of old." Upon discharge from military service or at any time during this phase of his career when it was determined by himself, as well as by his peers, that training in the art of "curative care" in any one of the specialties, medicine, surgery, or their subdivisions, was the future path for him to follow, ways and means for him to follow this natural desire would be within his grasp. An equitable distribution of talent in the various fields of medicine probably would follow. Future doctors would go through a practical period of indoctrination as general practitioners before aspiring to become specialists. A better state of morale and mutual understanding within the profession would ensue, with resulting more efficient medical care to the public at large. Likewise, more doctors would be trained for the medical needs of industry.

Industry, in turn, might well support financially such a teaching program in the various medical schools. Furthermore, there is reason to surmise that the U. S. Public Health Service would look kindly upon such a change of concept of medical teaching and support it.

Geriatrics Assuming Great Importance

The medical problems of the aging are daily assuming paramount impor-

tance in the health affairs of the nation. The sociological and economic factors require ingenuity, tact, understanding, and sympathetic appreciation on the part of all persons who participate in any way with any one of the many associated aspects. Physicians properly trained in the specialty of geriatrics would be, in my opinion, of inestimable value in helping to solve the present dilemma and mapping out a constructive program to follow in the years to come.

Again, the solution to this problem can best be approached by preparation at the basic teaching level. Geriatrics as a specialty is quite new. There are, as yet, fewer than 500 acknowledged authorities on the subject in the United States.[7] The geriatric approach is not confined to the specialist alone. Many general practitioners understand the problem very thoroughly. They have gained their breadth of vision and personal understanding of the situation by actual practical experience in the field. It is debatable how much their basic medical education actually helped them to become proficient in this field. The general practitioner's intimate association with the family as a whole, his periodic visits to the home, at child-birth, to see Jimmy with the mumps, has unconciously prepared him for a more conscientious interpretation (diagnosis) of grandma's complaints when she reports to his office for medical advice, unbeknown to her daughter.

What the general practitioner, or any other person, for that matter, is unable to do is to prescribe efficiently or effectively for the sociologic and economic aspects of grandma's problems, if she is a dependent, unless new methods of approach lead to competent understanding of the situation and become common knowledge to the many persons concerned.

Grandma is a person who has lived her life. She has ideas, and ideals, based upon her life-time of experience. She has feeling, a mind and body which upon careful examination, will indicate how well she has withstood the stresses and strains of life. Many of her complaints might well be considered within the normal range, if adept consideration were given to anticipated physiological changes expected in a person of a given chronological age. It is the interpretation of these complaints and how well they are explained and remedied by the attending physician, which denotes his skill. Practical, understanding psychotherapy is many times more efficacious than the latest "costly medicine" for "incipient" hypertension.

Prevention Must Be Stressed

To meet the increasing demand for this type of therapeutics, the doctor of tomorrow must be selected with this in mind. In circles outside of medical schools, doctors often are heard to say that "proper selections are not made," and that the "all-A" student from college does not necessarily become the best doctor: that the preclinical professors, and some of the deans who are not themselves medical doctors, are not close enough to the basic problems of medicine the young doctor soon encounters when he goes into private practice.

This indicates to me that perhaps there should be a better understanding within the profession as to what exactly the training of the future doctor should be like. Fortunately the broad concept of medicine is changing, and in a way that makes it more likely that the medical profession will soon be alert to the many great problems confronting it.

More and more thought must be given to the prevention of disease, rather than waiting until disease is established and must be cured.

Dr. James B. Conant,[8] president of Harvard, stated one aspect of the case when he said, "To train enough professionals to keep all the people well by curing disease would involve expenditure of so large a fraction of the income of any nation as to make the cure less attractive to the taxpayers than the disease. Indeed, if we tried to do the job today without our present knowledge of preventive medicine and public health, the situation would be hopeless."

The very terms "world health" and "preventive medicine" have only lately become familiar to the average citizen. I would like to see the term "constructive medicine" (as adopted by Stieglitz[9]) gain widespread use because I believe it implies something more than what is included under the term "preventive medicine" and that is the objective of making the individual and his environment as compatible as possible, with respect to general happiness and morale, as well as his actual physical health.

Concepts Are Changing

Our concepts of the essential nature of disease itself are changing. The new humors, hormones, enzymes, electrolytes and other chemicals of the body, are now being examined with the interest formerly reserved for anatomy, physical diagnosis and microscopy, giving us new ideas about common denominators in disease. It is becoming clear that disease is not limited to an anatomical part, an organ, a tissue or a system, but affects the entire organism.

We who confine our interests to constructive medicine are aware that a disease which may be limited morphologically to a tissue, actually affects not only the normal function of the entire organism, but also may set in motion a subtle progression of reverberations, psychologic, sociologic and economic, extending far beyond the sick person. We are constantly reminded that a human being lives in equilibrium with his environment and that in some degree he affects and is affected by all the conditions that surround him. Our attention is being focused more and more upon the remarkable new advances toward an understanding of the degenerative and metabolic diseases. The epidemic and endemic infectious diseases, and the problem of deficient nutrition, are problems essentially under control.

Recent knowledge gained through the use of cortisone and ACTH has almost revolutionized our concept of the nature of one great group of diseases. But we must not, in our enthusiasm for scientific discoveries, neglect the combination of thousands of scientific phenomena which we call a human being. The major concern of constructive medicine must be total health. Therefore, we have to be concerned not only with the important fundamental discoveries and researches, but also with immunization, nutrition, hygiene, safety, human relations, and education.

The multitudinous and arbitrary compartments into which illness has previously been subdivided are no longer water-tight. Rheumatoid arthritis merges with rheumatic fever and lupus erythematosus. We are thinking more of disordered cholesterol metabolism in connection with arteriosclerosis and less of the various ways in which it may be subdivided into pathological entities that fit with the appearance of dead tissues. The latter type of study will retain an im-

portance of its own, of course, especially for the purpose of differential diagnosis in individual cases, but it is encouraging that we are becoming less concerned with findings that set diseases apart, and more interested in the search for "common denominators".

This modern assualt upon artificial barriers has even brought us to the point of distrusting any absolute division between the states of health and disease in general. What is normal? What is health? Is it a question of what is average? Or is it merely the absence of demonstrable disease? My own view is that states of health and disease may merge imperceptibly together, and that what is health under one set of circumstances, is disease under another.

Rules Must Be Flexible

The fetish of retirement at age sixty-five is a subject widely discussed at present. I wonder if this idea of retiring everyone at that particular point is not an extension of the old fallacy that we are all created equal, without defining the nature of the equality. Physical and mental endowment, as well as circumstance, combine to make us anything but equal, and our inequality is particularly evident in terms of durability. One man is still at his best at seventy, while another is worn out at fifty. We need to find the means for objective measurement of biological, as contrasted with chronological, age. Until we do have reliable ways of doing this the figure sixty-five is perhaps a useful expedient, but the retirement age should not be regarded as being fixed at that point invariably.

Constructive medicine must be quick to use valuable new tools and ideas. This means that doctors of tomorrow must have flexible minds. Unless we limit ourselves to research in a special field, we must be careful to avoid the development of compartmentalized minds. We will be called upon to be sociologists, psychologists, economists, and business men as well as physicians. It is only by combining the necessary features of each that we will do our job well. First we will be physicians, of course, but the good physician has always made an effort to understand the environment in which his patients live.

It has never been enough for any doctor to confine himself to the content of textbooks of medicine. At the present time we are more aware than ever that artificial barriers to thought must be broken down, not only within the science of medicine itself, but also where they tend to isolate medicine from related arts and sciences. The ultimate goal, after all, is as Myerson stated it, "to understand man", and the doctor of tomorrow must be equipped to pursue the study of man. In time, many diseases now considered as disease entities, will be included in "physiologic changes compatible with age". More and more people will be considered "normal". What a tremendous effect this will have upon the general morale! No doubt the pharmaceutical branch of the family will find a more constructive outlook, with decreasing emphasis upon the curative aspects of disease.

Social Responsibilities of Medicine

The social responsibilities of the medical profession are of ever-increasing magnitude. John Romano,[10] speaking before the Buck Hill Falls Conference in 1948 on "Education for Professional Responsibility", stated that the function of medicine is "to acquire knowledge and to apply it to promote health, to prevent disease, to free man and to help man

free himself from the enslavement of pain, illness and physical disability, and from the equally great enslavement of morbid fear, guilt, and neurotic personal and social restriction, in order that man can function to his maximum capacity as a conscious, intelligent, rational, free human being." Thus it may be said that the responsibility of the doctor of tomorrow will be to aid all others in the effort to preserve peace and improve the general social status of man. If the problem is man and not the vicissitudes of this "materialistic" age why shouldn't the medical profession assume this larger point of view? Medicine is the study of man's physiological and psychological elements. It should be the best equipped profession to give vital assistance to human problems.

The doctor protests when one suggests that he lacks a social conscience. He will immediately tell you about the time he gives to clinics, and the patients who are cared for by charities, and the courtesies which he has extended as an individual. Commendable as all of this is, it has little to do with the big picture. It does not get to the root of the matter. It is not even a guarantee that he understands the causes which have necessitated the charities. We have usually preferred to spend large sums of money in collecting funds for charity rather than the necessary amount eliminating the need for that charity.

Survival the Real Problem

The problem of survival should be clear to all. The urgent need for each profession to devote its energies in solving the problems should be equally clear. It is important that we get at the reasons why man finds himself in his present dilemma.

The medical profession is the best equipped to understand man as a physiological and psychological human being. To do this in the best possible manner there is a need for re-evaluation of the entire medical education program. Society demands that its doctors fulfill that responsibility to civilization which the problems of that civilization have presented to us all.

Much constructive work is still to be done within the profession. A united front is non-existent at the present time. Some educators, still far distant from the actual firing line, are wont to carry on in the fashion of old, even though it is the general consensus that this is now economically impossible. Positive approaches to these problems have been, to date, relatively meager.

Alumni Should Be Active

There are 178,000 practicing physicians in the United States today. These physicians are, for the most part, graduates of the 79 accredited schools.[8] Yet how many of them actually play an active role in the medical affairs of their alma mater? Too often, when a doctor receives his diploma and goes into practice, he hears nothing further from the school until there is a drive for funds. When he returns to help celebrate an anniversary, he meets many of his old classmates who, like himself, are outwardly impressed by seeing first-hand what they have read in the literature in regard to the recent advances. Inwardly they are often chagrined at the lack of interest and insight of the medical men at the teaching and professorial level with the medical problems confronting the physician at the grass roots level.

Medical educators might well take heed and accept advice from their alumni. Each one should be considered part and parcel of the school which "spent

so much more" to train him than he paid in actual tuition. These graduates, actually few in number for any given school, are constantly in touch with the public at large and at the same time almost completely segregated from their professional associates. The universities, if they were on their toes, would know each graduate by name and the caliber of medicine he practices.

The university faculty, by moral persuasion alone, providing there is enough personal contact, could not only control but keep at optimal level the caliber of medicine practiced by their various graduates. The graduates, in turn, would feel free to discuss their problems and by so doing would have a direct and beneficial effect upon the manner and mode of present-day medical teaching.

To Prepare for Tomorrow's Need

The responsibilities of the medical profession are many. The most important is to prepare the doctor for tomorrow's needs, retaining the ideals and the spirit of integrity upon which the medical profession was founded. This is the doctor's job and must be done by the profession within the profession. Almost a complete right about face at the basic level of medical education will be required if we are to fulfill the functions of medicine "to acquire knowledge and to apply it to promote health, to prevent disease, to free man and to help man free himself from the equally great enslavement of morbid fear, guilt, and neurotic personal and social restriction in order that man can function to his maximum capacity as a conscious, intelligent, rational, free human being."

BIBLIOGRAPHY

1. *Medical Education in the United States.* The National Fund for Medical Education, Incorporated, 535 Fifth Avenue, New York, 1950, pp. 23.
2. FLEXNER, ABRAHAM, *I Remember,* Simon and Schuster, 1940.
3. FLEXNER, ABRAHAM, *Medical Education in the United States and Canada;* Flexner Report, Bulletin No. 4, Carnegie Foundation, 1910.
4. REED, LOWELL J., *Report of the Special Committee for Study of Medical School Grants and Finances.* (Sponsored by the United States Public Health Service), 1951.
5. RUSK, HOWARD A., M.D., *Medicine, Mobilization and Manpower,* J. A. M. A., Volume 145: p. 1256 to 1260, April 21st, 1951.
6. DICKINSON, FRANK G., Ph.D., *Supply of Physicians' Services,* J. A. M. A., Volume 145: p. 1260 to 1264, April 21st, 1951.
7. DUBLIN, L. I., Personal communication to the author.
8. CONANT, JAMES BRYANT, Forward, pages xv-xviii, in: SIMMONS, JAMES STEVENS, *Public Health in the World Today,* pp. 332, Harvard University Press, Cambridge, Massachusetts, 1950.
9. STIEGLITZ, EDWARD J., *A Future for Preventive Medicine,* New York: The Commonwealth Fund, 1945.
10. ROMANO, JOHN, M.D., *Education for Professional Responsibility,* Buck Hill Falls Conference, 1948.

Child Health and the Education of Physicians

Ward Darley*

Pediatrics has been the chief field of medicine to consider its task to be the maintenance of health as well as the curing of disease. With the spread of the concept of health management to adult medicine, it becomes important for the physician to understand the complex problems, emotional, social, and physical, of his patients throughout their entire lifetime.

The constitution of the World Health Organization defines health as "a state of complete physical, mental and social well being and not merely the absence of disease or infirmity." Until a few years ago, the definition of health in such positive terms would have been considered quixotic. In fact, it is only within the past two decades that progressive medical thinking has begun to consider health in terms other than the absence of disease.

From the standpoint of the education of personnel for the health and medical service fields, the implications of this definition are very great. The time is at hand when the primary attention of the student in these fields must be directed toward the so-called normal individual and his physical, physiological, mental and emotional development and well being. The spectrum of the individual's health status must be studied in its entirety—from the extreme of perfect health, on the one hand, to the extreme of death from disease on the other. The same consideration must be given to the causes and management of health as is given to the causes and management of disease. The human individual must be appreciated as being in a perpetual state of reaction to stimulation from his internal and external environments. He is constantly responding and reacting to situations. Depending on the nature of these reactions, varying degrees of health or illness may result. No two individuals react in the same manner or to the same extent to the same situation. Even measles can be considered as a reaction to a situation.

Family and Community Relationships Important

While the individual is the fundamental biological unit with which health and medical practitioners must be concerned, this concern would be incomplete if appropriate attention to the importance of the individual's family and community were not kept in focus. A healthy family implies a constellation of healthy individuals. A healthy community implies a constellation of healthy families.

If these concepts are to be developed as a background for practice in the health and medical fields, it follows that the health and medical practitioner of tomorrow must have a wide range of interests—interests that can blend broad scientific, humanistic and social responsibilities into a satisfying and

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effective pattern of service. A very wide educational experience will be necessary to back up this pattern. The use of the term "educational experience" would seem to indicate that knowledge sufficient to effective performance is at hand. While such may be true to some degree, we must admit that our knowledge, particularly in the areas of individual and social health, is far from satisfactory. More knowledge and new facts in these fields are essential. Consequently, it is time that health and medical educators concerned themselves with increasing stimulation of investigation in the areas of individual and social health. Such investigation should be conducted with the same ferocity with which we are attacking the area of disease. Space does not permit any detailed discussion of this type of investigation. It can be stated, however, that intensive laboratory and clinical investigations that are concerned with establishing ranges of normality for human development, structure and function are essential, and it can be stated further that more research must be aimed at discovering the ultimate causes of health and, *a priori,* of disease through the development of survey and statistical techniques that will study all phases of human life and activity.

Need High Level of Management

Even though our knowledge of health and its causes and of the prevention of disease is not all that we would like, we do know enough to elevate the management of health and the prevention of disease to a much higher average level than we ordinarily see. One of the keys to a more effective and satisfying service is to be found in the application of our knowledge through a closer personal relationship between the physician and his patients. The proper care of definitive disease itself can be presented as preventive medicine: examples, the thoughtful and sympathetic care of a case of hopeless illness so as to prevent unnecessary suffering; the following of a given case of illness to more complete recovery so that relapse, complications, sequelae and disability can be prevented; the diagnosis and proper management of minor illness so as to prevent the development of serious disease. If this approach to the management of established disease seems reasonable, it should also seem reasonable that we go further and look to a type of service aimed at the prevention of the minor illnesses, or to a service that will push health to the highest possible level of excellence. The rendering of preventive and health services of this type implies that the physician will relate himself to his individual patients in such a way as to acquaint himself thoroughly with the details of their physical and personality make-ups and that he will have the time, energy and ability to make effective use of this relationship and this knowledge.

Life Is Dynamic

Since human life is something extremely dynamic, it is necessary for the physician to be in a position to follow his individual patients throughout their complete life spans. The childhood period of growth and development has much to do with the health and illness patterns of later life. Consequently, the education of all physicians should be such that they at least appreciate all of the factors that contribute to the development of a healthy child. The philosophy that has just been outlined carries the same important implications for the health of adults that it does for

the health of children. The science of pediatrics is really the only branch of medicine that has long been oriented to the principle of the continuing care of the well individual with the idea of preventing illness and, insofar as possible, of controlling life along positive health lines. The time has come when this same approach must be applied to the care of adults. Among other reasons, this is of importance because of the relationship of adult to child health. Adults are the parents of children; a healthy home is essential to a high level of child health; healthy parents are essential to a healthy home. We must go further and extend our health philosophy into the community because the community is an aggregate of families. Therefore, an active interest in positive community health is essential if the average level of family and individual health is to be maintained at optimum levels.

Public Health Agencies Important

As the interest of the health and medical practitioner reaches into the community, it will find that it must frequently join hands with the interests of the official and volunteer public health agencies. This is as it should be. Such agencies play a most important part in the development and protection of the health of our population. It must be realized, however, that the approach and philosophy of the public health agency is very different from that of the physician in the private practice of personal health and personal medical service. Health development and protection at the public health level implies the feasibility of assembly line methods and the involvement of very little personal responsibility on the part of the individual recipient of service. The application of health and preventive services at the level of the physician-patient relationship is the very antithesis of the assembly line method and implies the greatest of responsibility on the part of the individual receiving service. While approaches and philosophies may be different, it must be recognized that public health needs the support of the practitioner and his patients and that in turn the practitioner and his patients often need the specific services available through the public health agency. The practitioner, therefore, must have the interests and information necessary to bring his patients and these services together.

Student Training Vital

If we are to provide our physicians with an educational background that will give them the range of interests essential to the type of practice that has just been outlined, we must look to the proper development of our institutions that are concerned with the training of personnel for health and medical service. The student physician must be provided with an educational experience that will bring him in contact with the health problems of the individual human being through his complete life span and with all phases of family and community life that are pertinent thereto. The student must see health service in action, and from this base be permitted to see the beginnings and development of disease and continue, as he does now, to have the opportunity to study disease from the standpoint of diagnosis and management. His experience must be such that he can appreciate the importance of the continuing care of the well individual as well as of the continuing care of a given case of illness. He must be led to appreciate

the importance of teamwork so that he can function to advantage with the nurse, the social worker, the health officer, the teacher, the clergyman, and all others who must intimately relate themselves to the welfare of human beings. The hospital, the clinic, the home and the community must be provided as the laboratories for this educational experience. In other words, effective education will depend upon the student's actual participation in a program of health and medical care within the framework of an active service situation. The supervision, the facilities and the organization necessary to such an educational set-up are expensive and obligate a high degree of community interest and cooperation.

Public Needs Educating

Finally, our new graduates in medicine must be made to realize that much education of their patients and of the public at large will be necessary before the type of health and medical service under discussion will be accepted and supported. Such education should begin at the grass roots and infiltrate upward. This is the only method that will stand a chance of keeping the demand within the limits of supply. The reverse,—namely, attempting to create a demand from above without first giving due consideration to the resources necessary to a satisfying type of service—will set the cause of health management back by many years. The essential educational and service leadership must stem from the rank and file of our professional people.

Environment Is Involved

Since the health of the child is largely the reflection of its social environment, and since this environment is very much a responsibility of society, certain questions might be raised which at first may seem extraneous but which are pertinent. Particular reference should be made to certain problems of our ageing population as they may be reflected in the health problems of our children. Today our socio-economic trends are such that living costs are rising, income from private investment is diminishing, high taxes are preventing saving, retirement at an early age is becoming compulsory and pension plans at public and corporate expense are increasing, all of which tend to relieve the individual of a feeling of personal responsibility for his own old age maintenance. One may be justified, therefore, in questioning the effect of all of this on the mental and emotional health of our children, particularly as they contemplate a life in which the incentive for their own personal responsibility has largely been removed. Apathy toward self sustenance is not conducive to the development of a healthy personality.

This leads to another question. The financial burden that may well result from our socio-economic approach to the problems of old age will be a tremendous one that must be charged back to society. Will this burden become so great as to diminish society's investment in the education of its youth and thus minimize youth's potential to combat life's problems effectively?

Aged's Problems Are Complex

It is not intended to minimize or to appear unsympathetic to the security problems that are currently facing the ageing and the aged of our population. The situation is not of their making. We must not forget that the old age segment of our population has been

increasing rapidly, and this largely because of the effective public and personal health services that have been focused on the children of our nation for the past half century. We must also realize that recent, current and future progress in the scientific aspects of health and medical practice can be counted on to add further to the average life span of more of our people and thus to the magnitude of the problems that will center around the aged in our population. A great many of our elderly people are extremely unhappy at being caught in the cross-fire of the socio-economic trends that have just been listed. Our socio-economic approach to and our methods of handling the health and medical problems of old age need most careful study and analysis to the end that the ageing individual's physical, mental and spiritual health may be of the best.

Questions such as these have health implications which, while they should be the concern of everyone, should be the particular concern of the medical and allied professions. The individual child should be looked on as the most important unit of our society, and everything possible should be done to make him strong physically, mentally and spiritually. All phases of his activity, whether they be personal or communal, have important health implications. The ability to manipulate his internal and external environments to the end that a strong individual will result will depend on a people who are capable of intelligent action. Education is basic to this necessary intelligence and particularly essential is the education of those groups upon whom the responsibility for leadership naturally falls. Medical men and women who must be trained today for tomorrow's leadership constitute one of the groups which must be properly educated.

Teaching Social and Environmental Factors of Venereal Disease

Mildred Martin*

Medical education, more and more aware of its responsibility to student and patient, is turning to the factors which influence the patient over and above disease itself. This is a report of one such teaching experience.

There has been increasing awareness of the influence of environmental and social factors in illness, and medical schools have begun to teach the importance of the sociological factors in disease. During the past three years, the Genito-Infectious Disease Clinic at Grady Memorial Hospital and Emory University School of Medicine has conducted a program of teaching junior medical students the significance of social factors in illness, with particular regard to the venereal diseases. The venereal diseases, as "social diseases," offer an excellent opportunity for the medical student to become conscious of the social components in illness. The increased incidence of venereal diseases among persons with poor marital adjustments, low incomes, and poor housing emphasizes to the students the close relationship of illness to social and economic problems.

During their two weeks assignment to the clinic, each group of four junior medical students meets with the medical social worker in an orientation conference to discuss methods of interviewing to obtain pertinent social information from their patients. An outline for taking a social history is given to each student but he is cautioned not to use the form as a rigid guide. He is encouraged instead to establish sufficient rapport with the patient to obtain a free discussion of emotions and problems associated with the patient's illness.

In addition, each student meets with the medical social worker before interviewing the patient to whom he is assigned. Patients are selected from those previously referred to the social worker because of sociological problems. The social worker raises questions as to the patient's income, his family situation, employer's attitudes, and other environmental forces which may influence the outcome and management of the illness. In certain patients, the student is encouraged to obtain information as to the circumstances leading to the patient's acquisition of the venereal disease as well as the social consequences of this infection.

Student's Interest Widens at Interview

The student interviews the patient alone in order to assume as much responsibility as possible in the care of the patient. During his interview, the student's interest often shifts away from the disease itself to the more intangible factors associated with it. He begins to realize, perhaps for the first time, the

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individuality of the patient and his problems. In many instances he sees his patient enmeshed in a complicated situation in which the family, friends, employer and community are all more or less involved. The impact of this social situation upon the patient's own personality also becomes apparent and the student begins to understand some of the guilt feelings, aggressiveness or anxiety which the patient may display.

After his interview with the patient and, when necessary the family, the student returns to the medical social worker to discuss the various social problems which were presented by the patient. An effort is made at this time to formulate a constructive plan which provides the available resources for social guidance, as well as adequate treatment of the disease.

During our three years experience with this program, we have found that the students' attitudes varied from a disinterested and skeptical indifference to an aware, mature interest. Many of the students, particularly at first, felt that all their time should be devoted to mastering the scientific aspects of medicine and found it difficult to become involved in such "unrelated matters" as the social and emotional problems of the patients. Many of this group eventually developed enthusiasm and came to realize that neither adequate treatment of the individual patient nor control of the venereal diseases within a community can be achieved without consideration of these social and emotional factors.

Most of the students recognized that the patient could not be depended on to return for adequate treatment until he overcame his fear that the disease would be discovered by his marital partner, neighbors or employers. Likewise, the patient's cooperation had to be obtained before the physician could obtain the names of the sexual contacts for public health investigation, tests on his family and long-time follow-up observations. The factors and motivations resulting in venereal infection also had to be understood in order to help the patient avoid reinfection.

Students' Reactions Varied

The complexity of the various factors affecting the patient's illness sometimes bewildered the student. In some instances, however, he became fascinated and intrigued by the new vista opening before him. Many students became personally involved in the patient's problems and attempted to use their own resources to secure jobs, money or clothes. Other students, however, voiced their doubts about the necessity of talking with the patient about his personal life and felt more secure in taking an impersonal medical history. They became aware that the success of this interview depended on their own personalities and their ability to form a positive relationship. They wondered what the patient's reactions would be and how they themselves would react to such discussion. It was often necessary to reassure them that patients usually quickly accepted and responded to this professional interest.

In the discussion with the worker, the students often brought out their own feelings about venereal diseases and sex. The worker encouraged them to attempt to analyze their own attitudes and prejudices and to consider how they might affect their acceptance of the patient's reactions.

The students usually accepted the fact that inadequate social and financial security was closely related to the transmission of venereal disease as well as to the treatment of the individual patient. They had to consider whether their clinic patient could afford loss of work days, what the employer would do, how the family would manage and whether it would be necessary to ask assistance from community resources.

The medical students were particularly interested in offering some tangible service to their patients and found it easier to see the function of the medical social worker in this area. The frequent inadequacies of community resources became apparent and the students often became indignant that so little could be done to help the individual with whom they had established rapport and sympathetic understanding. Many of them expressed impatience in accepting the slow changes and the complicated facets of the social order.

The contagious aspects of the venereal diseases made the students aware that the illness of a person always affects his family. The students were often impressed by the burden of chronic nursing care and rehabilitation which the family assumes for patients disabled by cardiovascular or neurosyphilis. The students also recognized that their experience with the patient's family was an important part of their training for future practice, and that the family's cooperation was necessary for adequate medical social planning.

We believe that our three years work with the junior medical students has given them a greater insight into the social and emotional problems of their patients. They have not only developed a better understanding of the interrelationship of the patient's emotional reactions, his organic illness and the environmental forces which produce them, but also recognition that good medical care requires consideration of all three factors. This experience, it is hoped, will make these future doctors more aware of the social pathogenesis of disease.

The Training of a Neurosurgeon

Winchell McK. Craig
Kendall B. Corbin*

At Mayo Foundation, residents in neurosurgery spend four years learning not only their own specialty, but developing a broad knowledge of the basic science fields related to it and the general specialties from which neurosurgery springs. The hope is that they will become conscientious members of the 'medical team'.

Graduate training in neurologic surgery during the past quarter-century has shown evidence of progressive improvement, as have the other specialty training programs, by the incorporation of greater opportunities for the trainee to obtain additional experience in the basic sciences. Thus, a purely resident and preceptor type of training in the wards and operating room has been augmented by laboratory and didactic experience in neuroanatomy, neuropathology, electroencephalography and neurophysiology. Furthermore, auxiliary training in related clinical fields has been increased by extending the time devoted to neuroroentgenology, neuroophthalmology, regional anesthesiology, neurology and psychiatry.

These progressive improvements in the training program of those preparing themselves for specialization in neurosurgery have been brought about through the efforts of various organizations as well as by all who actively practice the specialty. In particular, the American Board of Neurological Surgery, Inc., the American College of Surgeons and the American Medical Association have fostered improved standards. At the present time the aim is to train men with some experience in general surgery to diagnose and to treat surgical conditions involving the central nervous system. Thus, the competent neurosurgeon should have considerable training in neurology, ophthalmology, radiology and neuropathology. It is gratifying to one of us (Craig), as an original member of the American Board of Neurological Surgery, Inc., to note how much better trained recent candidates have been, especially in respect to their preparation in the basic laboratory sciences.

The American Board of Neurological Surgery, Inc., has taken the position that unless the training center has the clinical facilities with the proper number and variety of patients, credit cannot be given for training; there must also be available adequate opportunities for instruction in the basic laboratory sciences already mentioned. This board has adopted the suggestion of those who have advocated that the neurosurgeon be trained in the fundamentals of general surgery, and now requires a year of general surgery in addition to the other requisites.

The Program at Mayo Foundation

In the Mayo Foundation for Medical Education and Research, training in neurosurgery covers a minimal period of four years for the Fellow who has had no formal training beyond the intern-

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ship. The first year of the Fellowship is utilized for training in general surgery. During this year he obtains experience in general medical and surgical diagnosis and in operative general surgery.

Assignments during the entire Fellowship are made for periods of three months or longer. The Fellow who has completed his year of general surgery is next assigned to the neurology service for six months, three months to outpatient neurologic problems and three months to hospital neurology. During this six months each Fellow in neurosurgery has the opportunity to examine, diagnose and to follow the treatment of a great variety of neurologic diseases, medical as well as surgical. Patients subsequently seen in consultation by the neurosurgeon are first examined by members of the Section of Neurology so that the neurosurgical Fellow has the opportunity of witnessing the close collaboration of neurologist and neurosurgeon in achieving an ultimate diagnosis. During the first three months he assembles and evaluates the pertinent data on approximately 3 new neurologic cases each day; quantitatively his experience on the neurologic hospital service is similar except that he is dealing with more severely ill patients. While on the hospital service he has an opportunity to follow all neurosurgical patients whom he has seen on the diagnostic service. During this six months in neurology he attends daily seminars and conferences on neurologic and neuropathologic problems.

During the six months in neurology there is also opportunity to acquire experience in the examination of patients who have psychosomatic and psychoneurotic symptoms. Those who wish additional background in psychiatry may remain for three more months or longer, assigned to one of the three psychiatric services, depending on whether they wish experience with office psychiatric problems or the more severely incapacitating emotional disturbances requiring hospitalization of the patient. Throughout this training period the distinguishing features of organic and functional mental changes are emphasized.

A minimum of six months of the Fellowship period is devoted to neuropathology or other basic laboratory science. In pathology, in addition to the experience gained from studying the fresh surgical specimens continually brought in from the operating room, the Fellow has the opportunity to study microscopic specimens from 4,000 catalogued brain tumors. Representative sections of congenital, degenerative and inflammatory neurologic disturbances also are available for study. In addition, those assigned to neuropathology have the opportunity to review general pathologic anatomy by means of close association with the departmental conferences and other activities.

Physiology Sequence May Be Elected

By electing a minor sequence in physiology, the Fellow may spend nine months working in neurophysiology. During this period he also attends seminars, conferences and demonstrations in general physiology in order to obtain a background in this subject beyond the immediate confines of his specialty.

Three months are devoted to a combination study of neuroanatomy and electroencephalography. The neuroanatomy is given as a didactic presentation consisting of 36 lectures and 36 two-hour laboratory periods. Training in electroencephalography is provided in the form of observation and participation in the recording and interpretation

of the 16 daily records made in the electroencephalography laboratory, under the supervision of two trained fulltime electroencephalographers.

One additional quarter's work is devoted to training in neuroophthalmology and neuroroentgenology. While the Fellow is in ophthalmology, mornings are devoted to funduscopic examinations and afternoons to perimetric examination of the visual fields, in each of which subjects the Fellow acquires proficiency by carrying out numerous examinations under supervision. Ample opportunity for experience in the interpretation of roentgenograms of the spinal column and head is provided by recourse to current and filed roentgenograms.

The remaining eighteen months of the Fellowship period are devoted entirely to operative neurosurgery. For six months the Fellow spends most of his time in the hospital, acting as second assistant in operations for as many as four or five days a week and assisting different neurosurgeons. Also, he assumes responsibility under supervision for the preoperative and postoperative care of his patients, and is expected to follow the patient's progress day and night. During any full week he may assist at as many as 15 neurosurgical procedures.

Final Instruction is as First Assistant

During the final twelve-month period the Fellow in neurosurgery serves as first assistant to two or more neurosurgeons. It is our feeling that by working with more than one of the staff surgeons the Fellow can gain a broader experience, because of the variability in neurosurgical technics and procedures used to accomplish similar ends. Each neurosurgical Fellow therefore has the opportunity to reach his own conclusions regarding the value of particular technics which will prove most suitable for combined surgical procedures in which he participates. In addition to his responsibility for preoperative and postoperative care, and his training in operative technic, he has the opportunity of accompanying his chief on all neurosurgical consultations. This close relationship between Consultant and Fellow, which obtains throughout each day, permits him to observe and to assist in all phases of neurosurgical practice—consultation, preoperative care, surgery, convalescence and as witness to the surgeon's exercise of his responsibilities to the family and public. Here the beginner is given the essential and valuable opportunity to observe the art of practice from an experienced physician, as well as the technic of neurosurgery. During this year of training, the first assistant will participate in approximately 500 major neurosurgical procedures.

Ample opportunity to observe the treatment of injuries to the nervous system is afforded by regular periods which the Fellow spends on the emergency service. Here he sees all patients entering the hospital in an acutely critical condition as the result of injury or disease of the central nervous system. The location of Rochester in the midst of an active agricultural area, as well as its position on several important highways, provides (tragically) abundant examples of all types of injuries involving the central and peripheral nervous system.

Neurosurgeon's Relationship to Colleagues

In addition to the professional training given to each Fellow in neurosurgery in the Mayo Foundation, it is hoped that these years of association with members of a large medical "team" will enable him to relate himself as a neurosurgeon

to the entire medical profession. The spirit of mutual cooperation between the various departments which enables a large clinic to function is for the best interest of the patient. It is hoped that the Fellow will recognize the values of, and indeed the need for, such cooperation with others, whatever his personal arrangements for future practice may be. While working in the clinical fields related to his major subject, he not only learns to use ancillary diagnostic technics, but also to recognize the importance of the contribution which his medical colleagues make toward the diagnosis and treatment of each condition.

The Fellowship program is so arranged as to provide increasing responsibility for the diagnosis and care of patients. The first assistant may carry out opening and closing procedures for many of his chief's surgical operations, and, when qualified, toward the end of his Fellowship period he is enabled to perform complete neurosurgical procedures in an affiliated institution.

Throughout the course of his Fellowship he may attend lectures, seminars and conferences, held each evening during the week. These evening programs are arranged so that regardless of the individual's specialty, he may review the broader aspects of medicine and surgery during his three or four years of residency. The hope is that this constant exposure to other fields of medicine will aid in giving him a truly liberal medical education while he is acquiring the necessary background for his specialty. The seminars in neurosurgery, held once each week, provide an opportunity for him to present carefully prepared subjects in his field to other Fellows and staff. The occasion also provides opportunity for a full discussion on the part of Senior Consultants. All fellows are also expected to present reports of cases and papers at the weekly meetings of the staff of the Mayo Clinic and Mayo Foundation.

Fellowship is a Part of Graduate Education

All Fellows in the Mayo Foundation are registered as graduate students in the Graduate School of the University of Minnesota. During the three-year Fellowship, the majority register a thesis subject and work for the degree of Master of Science in their clinical field. Occasionally, the qualified man may choose to work toward the degree of Doctor of Philosophy. The requirements for a graduate degree in a clinical field include a minimum of six months full time in a basic laboratory science (usually neuropathology or physiology for Fellows majoring in neurosurgery), three years' residency, the completion of an acceptable thesis, and the successful passing of written and oral examinations. Committees for theses and examinations consist of members of the faculty from both the Mayo Foundation and the University of Minnesota.

The thesis must give evidence of originality, and independent investigation and thought in perceiving problems and in making satisfactory progress toward their solution.

"The general objective of the Mayo Foundation is graduate medical education in its broadest sense. Mr. Guy Stanton Ford, formerly dean of the graduate school and president of the University of Minnesota, in referring to this objective, said, 'Medical education, if it is to advance, must at least be able to supplement a faculty of skilled practitioners with men trained to carry forward the frontiers of medical science.'"

Mississippi's Medical Education Loan Program

Maria Voskamp*

This article describes an experiment undertaken by the state of Mississippi as a means for increasing the number of physicians practicing in the rural areas of the state. When one considers that the present physician-population ratio in these areas is 1:3500, the need for such a system is apparent.

Five years ago the state of Mississippi inaugurated a plan through which it is now obtaining more family doctors, especially for the rural areas of the state. As of July 1, 1951, 67 young physicians have entered practice in the state as a result of the medical education loan program. These men are practicing medicine in 35 of the 82 counties in Mississippi. Forty-four percent of the 98 physicians recently licensed by the Mississippi State Board of Health are state loan recipients. This program therefore supplied nearly half of the group of doctors most recently added to the physician roster of Mississippi.

More than 60 other young physicians have completed medical school and are now serving internships. These interns are scattered through 22 cities in 14 states and the District of Columbia. The internships are being served in 29 hospitals located in such widely separated points as Alexandria, Louisiana; Brooklyn, New York; Indianapolis, Indiana; and Los Angeles, California.

Well over 200 will be enrolled in 22 medical schools in the United States during 1951-1952. During the last school year, first-year students were enrolled in 10 medical schools. According to the legislation authorizing this program, loan recipients have free choice of medical school, approved internships and location of practice within the provisions of the law.

To date, 351 Mississippi residents have been approved for these state loans. They have come from 186 towns and 79 of the 82 counties in the state. Of the 283 loan recipients born in Mississippi, 63 percent are still resident in their native county. Every undergraduate institution in the State of Mississippi and many other colleges throughout the nation have contributed to the training of these men and women.

The Origin of the Program

In 1946 a group of far-sighted legislators, headed by Hon. Walter Sillers, speaker of the House of Representatives, crystallized public opinion and sentiment in House Bill No. 431 authorizing and establishing the state medical education loan program. Through this program loans from tax money are available to bona fide citizens and residents of the state interested in becoming family doctors in private practice within this state.

A loan may not exceed $1250 per school year including tuition payable direct to the medical school or a maximum of $5000 in four years. Veterans receiving aid under the GI Bill of Rights are eligible for loans of $500 to $1,000 pay-

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able directly to the students themselves. Loans carry 4% interest.

To be eligible for a loan an applicant must:

1. Need funds to complete medical education.
2. Have completed premedical college work and be acceptable for enrollment at an approved medical school.
3. Be willing to sign a state contract to return, upon completion of a general rotating internship, to a rural area approved by the State Medical Education Board, there to remain for a minimum period of two years, regardless of amount borrowed. Loan is discounted at 1/5 of student's total loan per year, the amount varying according to total amount borrowed by the individual.

   If the young physician remains in the approved rural area for five years the entire amount of the loan plus interest is credited to him. If he chooses to leave approved areas or the state at the end of two years he may pay off the 3/5 of his loan with which he has not been credited, plus interest and be free of contract obligations.

   All recipients of loans are obligated to practice in an approved rural area for at least two years.

The young physician requests approval for location of practice by the State Medical Education Board. If possible the young doctor is approved for the place of his first choice within the provisions of the law. Approval is given by the Board after considering all factors involved: need of the community; desire of the young physician; suitability of location for practice; and similar determining factors. The approval of location of practice is a straight business deal between the State Medical Education Board and the young physician involved as well as between that young physician and the community in which he is interested. No commitments or promises of binding nature are made by the young physician prior to approval of the Board nor by the Board for the young doctor.

The State Medical Education Board keeps record of factual data relating to need for additional physicians in the state. This material is available for use of the Board, the young physicians and towns interested in obtaining a physician. Also available to communities are names of young Mississippians who have received part or all of their medical education as a result of this program.

This progressive program is administered by a five-member board. The Dean of the medical school at the University of Mississippi, Dr. D. S. Pankratz, serves as Chairman of the Board by virtue of his office. Dr. Felix J. Underwood, Executive Director of the Mississippi State Board of Health, serves as member of the Board by virtue of his office and was elected Vice-Chairman by the group itself. The President of the Mississippi State Medical Association serves during his one-year term of office. That member this year is Dr. James Grant Thompson of Jackson. Two members are appointed for four-year terms by the Governor. These members now are Mrs. H. H. Ellis of Meridian, and Dr. Richard A. Bolling, Cleveland, Mississippi. Working offices are maintained at Jackson, Mississippi. Staff is composed of the Secretary-Treasurer of the Board and one bookkeeper-stenographer.

Results of a recent study show that more loan recipients are sons of those engaged in agricultural pursuits than any other group. In the professional rank, more physicians' sons are loan recipients than sons of any other professional group.

Reasons given by loan recipients for the study of medicine reveal the dominant influence of parents and physicians. Interest since childhood is also a primary reason, while the desire to help others reveals the altruistic motives of many.

At one time seventy-five percent of

loan recipients were veterans. Men now entering school as a result of this program are primarily non-veterans, and consequently, younger.

Need for Doctors is Critical

Mississippi was in the greatest need for additional doctors at the time this program was established. *That need continues and is not yet met.* It is true that the 67 physicians entering practice this summer as a result of this program are young physicians with years of life and practice to offer, but it is also true that death and war are constantly claiming physicians, and a certain proportion leave the state for other fields.

Two counties, Benton, population 10,429 and Issaquena, 6,433, each have just one physician.

As of January 1, 1951 there were 1,441 physicians in the entire state. Of these, 715, or nearly 50%, practiced in 23 towns, these 23 towns constituting a smaller population group than the total population of the state's rural areas. While it is true that physicians in the larger towns are able, through clinics and hospitals, to meet some of the demands for medical services in the surrounding rural areas, it is also true that, especially at night, even town dwellers have difficulty in getting a doctor. Few of the physicians in the larger towns are able to answer many calls in the rural areas.

Outside of the towns with a population of 5,000 or more, there are only 726 physicians in the State of Mississippi. These 726 physicians must serve the medical needs of 1,836,706 persons (by the 1940 census). These physicians are not all in general practice, despite their rural addresses. The ratio of physician to population in the state's rural areas stands at 1:3,500. The ratio of *active* physicians to population may be even more critical, since 401, or 55%, of the doctors in rural areas in the state are over 60 years old and many of them are retired, or semi-retired. Only 181 members of the rural physician group in Mississippi are under 40. In the large towns these figures are radically altered; 27% of the doctors there being over 60 and the largest group being under 40.

This loan program is *not* designed to assist residents of other states nor to change the goal of the young Mississippian who wishes to enter a specialized field of medicine or a specific location of practice upon which he has already decided. It is designed primarily for the benefit of the state as an inducement to the potential physician who is interested in practicing in the rural areas but who lacks funds with which to obtain his professional training in order that he may attain that goal. Its purpose is to help the potential physician whose chief aim is service to enter fields where service is needed and where opportunity is great.

Through the state medical education loan program Mississippi is getting doctors who, if they had to borrow elsewhere, might complete their medical studies but might never practice in their home state of Mississippi. This program therefore means not only needed financial assistance for Mississippi's potential physicians but more doctors for the rural areas which are in greatest need of those physicians. It is a working practical solution to the shortage of doctors in the rural areas.

A Statement by the Joint Committee on Medical Education in Time of National Emergency

To the Armed Services Committee of the House of Representatives, January 30, 1952, concerning the Report of the National Security Training Commission.*

The Joint Committee on Medical Education in Time of National Emergency represents two independent and separate national organizations that are primarily concerned with medical education, one being the Association of American Medical Colleges, the other being the Council on Medical Education and Hospitals of the American Medical Association. The list of the full Membership of this Committee is appended to this statement.

On behalf of the Joint Committee, I should like, at this time to express our appreciation for this opportunity to present our views on the important problems that your Committee has under consideration.

While the Joint Committee has studied most closely the problem of mobilization and need for manpower, as it relates to medical education, it should be emphasized that our Committee has endeavored to view this problem in terms of a broad program for the effective training and utilization of specialized personnel to meet both military and civilian needs, and not in terms of any special interest of medicine or medical education.

The Joint Committee does not consider it its function to take a position for or against the principle of Universal Military Training. The purpose of our testimony is to urge that if the Congress decides to establish a program of Universal Military Training, provision be made for an adequate, continuing flow of students through institutions of higher education. Only thus can the requirements of the Armed Forces and the civilian population for physicians, dentists, engineers, intelligence officers and other specialized personnel be realized.

We wish to emphasize that the Joint Committee endorses the principle that all citizens should serve their country and, therefore, firmly believes that those deferred under the provisions of Public Law 51 for special education and training should be, in fact, deferred and not exempted. From a study of Public Law 51, particularly Section 6(b) and (i), we are impressed with the belief that the Congress has recognized the importance to the national health, safety and welfare of permitting those who have the potentiality of serving the nation best after special training to continue without interruption their course of training until it is completed.

With this belief in mind, the Joint Committee testified before the National Security Training Commission in opposition to a requirement that would make it necessary for college and professional students to interrupt their training at age 18½ to take six months of basic training and in opposition to a program that would place these men in the Reserve Corps for seven and one-half years immediately following their basic training.

The Joint Committee's basic belief that the interruption of the training of potential specialized personnel is undesirable in the national interest is unchanged. In view of the fact, however, that the bill drawn up by the National Security Training Commission provides for a universal six months' basic training with inductions scheduled monthly and for voluntary inductions at convenient times of the year, it is our Committee's belief that if all colleges and high schools would adjust their schedules to this six months' period, such a program might

*This statement was presented by Dr. Stockton Kimball, dean of the University of Buffalo School of Medicine and chairman of the Joint Committee.

possibly be put into effect without producing a serious interruption of the educational process.

On the other hand, the requirement in the proposed bill that all men on completion of their basic military training enter the Reserves for a period of 7½ years, carries a grave threat to the continuing production of the trained specialist essential to national defense. Under such a program all able-bodied future specialists would be subject to the possibility of prolonged postponement or interruption of their training by a call to active military duty. This danger and the need for a safeguard is recognized by the National Security Training Commission. The Joint Committee strongly urges implementation of the suggestion made in the report of the National Security Training Commission but not included in its proposed bill—namely, that the 7½ year reserve liability be postponed until students have completed or discontinued their graduate or professional training.

The Joint Committee further believes that any bill that is adopted should provide assurance that the selection of such students and of their educational programs will remain in the hands of the individual colleges and universities. If such assurance were not given, the possibility would exist that the power to select students for further education and the decision as to the courses of study these students could pursue might be assumed by the National Security Training Commission or some other agency of the federal government. To prevent loss of further time or the possibility that the student, before he can be selected for entrance into college, will be ordered to active duty, the bill should provide specifically that before or during the period of basic training colleges may select those students who are to be allowed to continue their education.

Since graduates of the ROTC are obligated to take line commissions on graduation from college and are, therefore, not available for graduate or professional training, enrolment in ROTC programs in undergraduate colleges is not adequate protection of the supply of specialists.

The above statements express the opinions of the Joint Committee concerning the bill and the report of the National Security Training Commission.

The Joint Committee wishes, however, to re-emphasize the position it took in testimony before the National Security Training Commission, namely, that in preference to the proposals in the bill submitted by the National Security Training Commission, the Committee concurs in the recommendations contained in the report of the six Scientific Advisory Committees to the National Director of the Selective Service System dated December 1, 1950, which: (1) urge that a student whose aptitude or previous accomplishment indicates that he can make his best contribution to the nation as a trained professional man be placed in a classification or category that will permit him to continue his education uninterruptedly, (2) that a student qualifying for such classification, should be so classified before or at the time he reaches the age for induction for training or service, and (3) that his basic military training be postponed until his specialized education is completed, or until he ceases to pursue his education satisfactorily.

It is urged that a plan similar to that suggested by the Scientific Advisory Committees and later adopted with slight modifications by the Selective Service System be used to implement such a classification in a program of universal military training. This plan provides for defining educational aptitude as a specified minimum score on a general classification test, or a record of previous educational accomplishments sufficiently high to indicate genuine promise of eventual scientific, professional or specialized competence.

The advantages of such a plan for the deferment of promising students are several. It insures that the selection of stu-

dents will remain in the hands of those most fitted to exercise this function—the colleges and the universities themselves. It avoids the loss of valuable time which could result from requiring those who are able to continue their education to interrupt their studies for a period of six months of basic training. This period represents a diversion of time and effort which might better be spent in the planned, sequential educational program. Further, if students should be required to be inducted and go through basic training before acceptance into college and before discovering whether they are to continue their studies, it is likely that for at least the year preceding their induction the uncertainty of their future course would seriously distract many of them from their work.

Another definite advantage of the plan we have suggested is that it would make available to the training program specialized personnel in several categories. Thus, for example, those students who are deferred from military training and service until they complete their medical education would then be available to serve their period of obligatory training and service as medical officers in the universal military training program. In this manner it is likely that an adequate force of medical officers could be available regularly for the universal military training program without the necessity for special legislation requiring certain groups to give additional service after once having gone through the basic training program. Since it provides that any student deferred from training or service will be liable for such training and service for eight years beyond the age at which such liability ends for those not deferred, Public Law 51 insures that students deferred for special training will eventually be available for service as specialized personnel.

Mr. Chairman, I should like again to express our appreciation for this opportunity to appear before the Committee.

MEMBERS OF JOINT COMMITTEE

Dr. Stockton **Kimball**, Dean (Chairman)
University of Buffalo School of Medicine
Buffalo, New York

Dr. Joseph C. **Hinsey**, Dean
Cornell University Medical College
New York, N. Y.

Dr. A. C. **Bachmeyer**, Past President
Association of American Medical Colleges
Loveland, Ohio

Dr. Dean F. **Smiley**, Secretary
Association of American Medical Colleges
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Dr. George Packer **Berry**, Dean
Harvard Medical School
Boston, Mass.

Dr. H. G. **Weiskotten**, Chairman
Council on Medical Education and Hospitals
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Skaneateles, N. Y.

Dr. Harvey B. **Stone**, Member
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Dr. Victor **Johnson**, Director
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Dr. Francis R. **Manlove**, Associate Secretary
Council on Medical Education and Hospitals
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Mr. John **Stalnaker**, Director of Studies
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Dr. Donald G. **Anderson**, Secretary (Secretary)
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Dr. B. R. **Kirklin**, Secretary
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Mr. C. Joseph **Stetler**, Secretary
Council on National Emergency Medical Service
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Dr. Harold **Diehl**, Member
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Dr. David **Ruhe**, Director
Medical Audiovisual Institute
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Changing Trends in Giving

Marvin W. Topping, executive secretary of the American College Public Relations Association[1], has recently analyzed the figures released by the United States Treasury Department concerning contributions to religion, education and philanthropy listed by the nation's taxpayers on their 1948 income tax returns. For that year there were 254,681 taxpayers with incomes of $25,000 or more. This group gave a total of $394,493,000, in contributions to religious, educational and philanthropic organizations. This was 3.1% of their total income of $12,718,455,000.

Arnaud C. Marts, of Marts and Lundy Inc., points out[2] that in the eight year period of the "Golden 20's" (1922-1929), only 82,753 taxpayers received annual incomes of $25,000 or more. Furthermore, contributions from this group averaged $163,601,000, or 2.5% of their total average annual income of $6,484,079,000.

From these facts it would appear that the number of persons in the $25,000 or more income group has more than trebled in the past 20 years. While this group has less than doubled its total income it has more than doubled its contributions. The average member of this "wealthy group" in the 20's gave $1,976, 2.5% of his total income. In 1948, his counterpart gave $1,548 on the average, but this represented 3.1% of his total income.

A part of this increased giving is undoubtedly explained by the Federal government's allowing individuals to deduct from taxable income amounts up to 15% of their gross income. This makes it possible for them to make a tax saving of 20 to 90 cents on every dollar they give to a tax-exempt organization.

Perhaps even more important is the trend toward giving under the law which permits corporations to deduct up to 5% of their net income for philanthropic gifts. Beardsley Ruml, who developed the pay-as-you-go tax plan for individuals back in the 40's, has recently collaborated with Theodore Geiger of the National Planning Association staff, on a pamphlet which urges corporations to increase their present gifts totalling 1% of profits to the full 5%, as a matter of good business. They state, in Planning Pamphlet No. 73, "Dollars wisely and soundly invested in worthwhile welfare activities come back manifold over the longer term . . . and can be among the most productive and remunerative forms of business expenditure."

The U.S. News and World Report, January 18, 1952, states, "In total, corporation gifts to causes and institutions of various kinds in 1951 are believed to have approached 350 million dollars." It is of significance that gifts to the National Fund for Medical Education, for 1951, totalled $1,600,000. The lead article in this issue of MEDICAL EDUCATION calls attention to the importance of corporate giving.

(1) Washington, D. C. (2) *Gifts by Larger Tax Payers Show Increases*, FINANCING PHILANTHROPY, Marts & Lundy Inc., N. Y. C. Jan. 1952.

A Disgraceful Incident

A full-time, salaried professor of a clinical subject in one of our medical colleges recently resigned his position. His reasons for resigning may have been good or they may have been bad. In either case the professor was well within his rights to disagree with the administration of the medical school and to express that disagreement by severing his connections with the school.

Under no code of ethics worthy of the

name can the chain of events which followed this resignation be defended. When the school named another man in the department to succeed as head of the department, he was subjected, over a period of weeks, to a process of intimidation and petty annoyance sufficient to bring about his resignation. Letters and telegrams poured in vilifying him for accepting the proferred position. Telephone calls of the same type came with such frequency that he had to have his phone disconnected to get a night's sleep.

A well qualified candidate from a distance visited the school and expressed his willingness to accept the position as head of the department; but no sooner did he return home than the same process of vilification by letter, phone and telegram began. Added was the threat that he would not be admitted to the local society of the specialty if he accepted the position.

If there was any doubt of a medical school's ethical right, under the American Medical Association's code of ethics for physicians, to employ a full-time, salaried professor of a clinical subject, it was dispelled by the action of the House of Delegates of the AMA at its recent meeting in Los Angeles, when it approved the following statement recommended by the Board of Trustees under the title "Guides for Conduct of Physicians in Relationships with Institutions" (JAMA Dec. 22, 1951, p. 1685).

> 1. A physician should not dispose of his professional attainments or services to any hospital, corporation or lay body by whatever name called or however organized under terms or conditions which permit the sale of the services of that physician by such agency for a fee.
>
> 2. Where a hospital is not selling the services of a physician, the financial arrangement if any between the hospital and the physician properly may be placed on any mutually satisfactory basis. This refers to the remuneration of a physician for teaching or research or charitable services or the like. Corporations or other lay bodies properly may provide such services and employ or otherwise engage doctors for those purposes.

It is obvious that the use of such weapons as intimidation and vilification is so far below the accepted ethical standards of a professional group that it will bring to the user only the scorn of his own peers. As for the administrator of the medical school, he would be a poor man indeed if he conceded one iota to forces working in such an underhanded manner.

* *

New Association Emblem

This issue of MEDICAL EDUCATION carries on its front cover a new Association emblem. Designed by Thomas S. Jones, professor of medical and dental illustration at the University of Illinois College of Medicine, the new insignia combines elements symbolizing the high aspirations of medical education. The emblem incorporates the authentic staff and serpent of Aesculapius, official symbol of the profession of medicine; the torch, symbol of enlightenment and knowledge; the Temple of Aesculapius, Greek God of medicine, which symbolizes the institutional aspects of medical education; and the AAMC monogram, long used to identify the correspondence and publications of the Association.

We believe the new emblem represents well that combination of tradition, dedication and teaching which distinguishes the medical profession. Thanks and gratitude are due Professor Jones, for his skill and inspiration, and Dr. Stanley W. Olson, dean of the College of Medicine of the University of Illinois, for his cooperation.

Some of the richness of the legend of Aesculapius is contained in the following description of the temple:

> " . . . The temple of Asklepios, the central shrine, a richly decorated and coloured doric building, erected in the fourth century B.C. . . . At the west and east gables were pediment groups representing a battle with Centaurs and a combat of Greeks and Amazons. . . . A beautiful ivory door, which cost 3,000 drachmae, closed the sanctuary; within, the della was a single chamber; there was no opisthodomus. . . . Within the temple stood the great chryselephantine statue of Asklepios made by Thrasymedes of Paros, a work somewhat resembling the Parthenon figure, or the vast Zeus of Olympia, or the Hera at the Argive Heraeon; the flesh was ivory, the rest

gold splendidly enamelled in colours. . . . The god was sitting on a throne, a large golden serpent rising up to his left hand; on his right lay a dog, and in front was an altar. Gold and ivory were beautiful materials for the sculptor, though involving much difficulty when combined. The disappearance of all attempts at chryselephantine sculpture in modern times is perhaps due to this difficulty in production and to the cost, but probably more to the fact that the ivory usually tended to crack. The great figure of Athena in the Parthenon needed, we know, to be frequently moistened on its ivory surface with water. At Olympia, oil was applied to the great figure of Zeus, but curiously enough the Asklepios at Epidauros needed neither. As the god of medicine, it may be supposed that he was able to preserve his own integument, but Pausanias tells us that a well, beneath the pavement of the temple, diffused sufficient moisture to prevent contraction and cracking on the ivory. On the throne were representations, doubtless in relief, of Bellerophon killing the Chimaera, and of Perseus with the head of the Medusa."

—from "The Temples and Ritual of Asklepios" by Richard Caton: C. J. Clay & Sons, Cambridge University Press, 1900.

* *

Nominations for the Borden Award

Dr. Edward West calls attention to the fact that nominations for the Borden Award in the Medical Sciences for 1952 must be received by July 1, 1952. Dr. West is chairman of the Association's Committee on the Borden Award.

The award was originally established in 1946 by the Borden Company Foundation, Inc. It consists of a thousand dollars in cash plus an appropriately inscribed gold medal and is awarded annually for outstanding clinical or laboratory research. The research must be done by a member of the faculty of a medical school which is a member of AAMC. Previous winners of the award have included such distinguished medical scientists as Dr. Fuller Albright, Dr. George N. Papanicolaou and Dr. Gerty T. Cori. Last year's Borden Award winner was Dr. Edwin Bennett Astwood. honored for his work on thiouracil.

Regulations Governing the Award

1. Nominations may be made by any member of the faculty of a medical school which is a member of the Association of American Medical Colleges.

2. The Award in any year will be made for research which has been published during the preceding five calendar years.

3. No person may receive more than one Borden Award for the same research, although he may receive a later Award for a different research project.

4. If two or more persons who have collaborated on a project are selected for an Award, the gold medal and check shall be presented to the group, and bronze replicas of the medal presented to each of the collaborators.

5. The Association may refrain from making an Award in any year in which no person reports research of the quality deserving an Award.

6. Only one Award shall be made during any one year.

7. A nominee who fails to receive the Award may be nominated for the Award for the same work in a subsequent year.

8. The nomination should contain the academic history and scientific accomplishments of the candidate and a reasoned statement of the basis for the nomination.

9. Five (5) copies of each nomination should be forwarded to the Secretary of the Association (D. F. Smiley, Room 1001, 185 North Wabash Avenue, Chicago 1, Illinois), together with five (5) sets of reprints bearing on the investigation for which the nomination is made. The reprints will be returned if requested.

10. All nominations must be in the hands of the Secretary before July 1, 1952.

Our Readers Write

Money, Control and Medical Schools

To the Editor:

My good friend, Walter Bornemeier, Secretary of the Chicago Medical Society, has recently written an editorial for the "Chicago Medical Society Bulletin" on the subject of aid to medical schools. In this editorial he points out that the physicians of the United States have responded very poorly to the appeal of the American Medical Association to contribute to the fund of the American Medical Education Foundation. He states that in ten months the fund grew to approximately four per cent of what had been hoped for.

His suggestion, which has been voiced by many other physicians, is that the only practical way to raise sufficient funds to assist the medical schools is to assess the members of the American Medical Association fifty dollars a year for twenty years which would raise approximately $5,500,000 per year. He concludes the editorial with this statement: "Then, like a government which controls that which it supports, let us advise the Medical Schools to discontinue their duplication of effort in research and spend some of the money turning out doctors."

I was very grateful to Doctor Bornemeier for having voiced a sentiment which a number of us have suspected but have been reluctant to attribute to organized medicine lest we be accused of impugning its motives.

There are, I believe, sound reasons why the physicians of our country should not, as a group, be responsible for medical education. Organized medicine has too great an interest in the matter to be completely objective and is certainly poorly prepared to defend itself if it should be criticized for the way it has influenced the education of young physicians. It strikes me that the present arrangement whereby the Council on Medical Education and Hospitals shares with the Association of American Medical Colleges the responsibility for accrediting the schools is an ideal one. If the American Medical Association would subsidize the medical schools to any large extent and would control educational policy, it would deprive its Council on Medical Education of much of the force of the current accreditation program. A school which was in difficult straits because of failure to maintain academic standards would then appeal to the Council for the funds to improve its program.

At the present time, as Doctor Bornemeier has indicated, organized medicine is interested in increasing the out-put of physicians. It may well be that at some future time organized medicine would be equally concerned about reducing the number of physicians who were entering the field to compete with those physicians already in practice.

I should not like at this time to raise the issue of Federal aid to medical education nor to discuss the merits of that method versus the private methods which are currently under consideration. I do not mean to imply either that the assistance of the individual physicians is unwanted.

It strikes me that the most appropriate method for securing assistance from physicians is not through the medium of organized medicine and the levying of a special assessment for this purpose but rather the more logical plan is to appeal to the alumni of the individual schools to assist the medical colleges from which they are graduated. I am not so naive as to assume that the alumni would not wish to have a voice in the affairs of their own school, particularly if they are contributing substantially to the budget of the school. I am firmly convinced, however, that this kind of interest would represent a more personalized concern for the welfare of an individual school than would be the interest of organized medicine in all of the medical schools. The interest of the alumni body is strongly charged with the element of loyalty, personal pride and community pride. Any medical school would be benefitted by the kind of advice and suggestions that might come to it from its own alumni group.

Stanley W. Olson,
Dean, University of Illinois,
College of Medicine

Heat or Light on the Premedical Status?

To the Editor:

Will you permit me to comment on a recent article in the Journal* concerning premedical education?

First, I am surprised that you permitted such an article to appear at all. In any scientific article it is expected that the author has checked previous work, read the literature on the subject, and evaluated such literature properly. In the

**The Premedical Status:* Max S. Marshall. Journal of MEDICAL EDUCATION, Vol. 26, No. 4, July, 1951.

article in question it is obvious that the author did not read the literature or investigate his subject even casually or he would not have written the article at all. It is a statement of an opinion wholly unjustified by the facts.

The author states that "no one is interested in educating premedical students". I would like to suggest that he read the more than forty articles published in the last few years in *The Scalpel*, many of which were written by medical educators, and at least check the titles of articles on similar subjects in a number of other journals including the JAMA and the JAAMC (now Journal of MEDICAL EDUCATION). I would also suggest that he examine the record of attendance and participation in the four Regional Conferences, the three programs in cooperation with the AAAS, the one with the ACS, and the National Conference in cooperation with the AAMC sponsored by AED, and then say that no one is interested in educating premedical students. And if reading all this material is too much trouble I suggest that he ask the Chairman of the Subcommittee for the Survey of Preprofessional Education, Dr. A. E. Severinghaus of the College of Physicians and Surgeons; or Dr. Stanley Dorst, Dean of the College of Medicine of the University of Cincinnati; or Dr. Dean Smiley, Secretary of the AAMC, if they think that no one is interested in educating premedical students. Better still let him ask the 11,000 active members of Alpha Epsilon Delta and the 400 faculty members who are Honorary members of Alpha Epsilon Delta, if anyone is interested in educating premedical students. Best of all, let him become associated with this Honor Society and find out for himself that a great many people are interested in educating premedical students. Perhaps he may even become interested in it himself.

H. E. Setterfield, National President,
Alpha Epsilon Delta National Premedical Honor Society.

* *

Dr. Setterfield's Editorial from Scalpel

—from "With the National President" in the November 1951 issue of *Scalpel*.

I cannot resist taking this opportunity to comment on some of the statements made in a recent article by Dr. Max S. Marshall entitled "The Premedical Status" (Journal of Medical Education: Vol. 26, No. 4, July 1951).

I do not know Mr. Marshall. I do not know what contacts he has had with premedical education and educators. Judging by his own statements they have not been many or recent. Most startling and questionable statements in the article are these: "There was a premedical curriculum, managed by men who looked down on medical education" and *"No one is interested in educating premedical students"*. (Italics his). I suspect that I know personally as many premedical teachers and advisors in the United States as Dr. Marshall does and I do not know one who "looks down" on medical education or is not interested in educating premedical students. Most of them are deeply sincere; appreciate and accept the responsibility for their part in the preparation of our future physicians, and make every possible effort to improve their teaching and their advisory work with students. Among other things done to improve their work, several hundred have traveled, usually at their own expense, to attend the four Regional Conferences, the National Conference and the meetings associated with the American Association for the Advancement of Science and the American Chemical Society sponsored by the Alpha Epsilon Delta. I would mention specifically such outstanding medical educators as Dean Dorst, Dean Severinghaus, Dean Calvin, Dean Kennedy, Dean Caughey, Dean Doan, former Dean Leake, Dean Weiskotten, Dean Berry, Dean Mullin, and many other members of medical school faculties, and several hundred educators in the collegiate field who have shown their deep interest and concern with problems of premedical education by their part in our programs. Many more will do the same thing in the years ahead. No one can say this is an indication of lack of interest or contempt for medical education.

Apparently Dr. Marshall has never been associated with a Premedical Club with membership standards such as those of Alpha Epsilon Delta. To accuse the premedical club of mixing "naive conceit with equally naive idealism" is to misunderstand young people entirely. I would prefer both to the blatant air of superiority and sad lack of ideals all too often found among members of the medical profession. Is it improper for a student to believe in himself and to have ideals for his future life work? If a student does not bring both with him to medical school it is doubtful if he will acquire them there.

As to having the medical educators address groups of premedical students and so properly orient them towards medicine (sic!) that is one of the activities that the sixty-one chapters of Alpha Epsilon Delta carry on. Occasionally the medical educator is unwilling to give the time and thought for such talks or prefers to speak about his specialty, thus showing his misunderstanding of what his contribution to the education of the premedical students may be. Of course there are some 'educators' in both the colleges and the medical schools who are not educators at all but serve a vocational function in the 'training' of students. Because the College of Liberal Arts is more concerned with education than training, it is sometimes assumed that the College knows nothing about and is not interested in medical 'education'.

As for soundness of personality, sense of honor and duty to self and society, realistic idealism, intelligence and faith in true education is the only hope of our way of life. I will not admit the superiority of any group, students or teachers, to the standards of those in premedical and medical education. H. E. SETTERFIELD

Dr. Marshall's Reply

To the Editor:

I am most grateful for the opportunity to reply briefly to the preceding comments by Dr. Setterfield. I am happy to agree at the outset that to suppose that no one is interested in premedical education is ridiculous.

To attempt too specific an answer to a diatribe of this sort is only to start further rabid signs and symptoms, which may better be avoided and would never be settled. May I say in this regard only that I should welcome the opinions of the 11,403 persons, mentioned by Dr. Setterfield, on premedical education. I feel quite sure that most of them would be quite fully dissociated from the fulminant remarks of Dr. Setterfield.

May I, then, make just two points?

First, Dr. Setterfield commits the error of the isolated phrase: "No one is interested in educating premedical students." The essence of the paragraph in which this appears is that premedical students in their preparatory environment take their basic training along with others who are headed elsewhere. It simply is not practical to have at heart the future program of each student in all academic classes, though I have known a few men who tried it. Premedical students cannot often be segregated for special premedical training. Even were it practical, many, quite likely including Dr. Setterfield, would argue that basic training is basic, whatever the future applications. That anyone would take the lack of specific focus on future needs in day by day teaching to mean that no one cared what happened to premedical students is remarkable.

Second, I should like to indicate something of the support which was given the article. It passed editorial approval. Since editors are victims of chronic complaints, this defense is debatable, but I think we can not condemn our editors too quickly. All of us can howl, but not all of us could serve as well. The article received favorable comment of a trustee of a university, strong enough so that it was taken up with some high in authority and so that it was reprinted in the ASSOCIATION OF AMERICAN COLLEGES BULLETIN (37: 505, Dec., 1951). A dean of one of our better known medical schools discussed the matter favorably and with thoughtful care. A premedical group was sufficiently impressed to ask to mimeograph it as a basis for a discussion session. A dean of a graduate school disagreed with a point but approved the objective rather strongly. There were other comments, none unfavorable. Columbus, Ohio, where Dr. Setterfield has his position, is not far from the source of most of these comments. His own campus is even represented. I am sure that Dr. Setterfield is properly venturing a personal reflection but is not properly speaking for the many, as he implies.

I think I know why the itching hackles of Dr. Setterfield led to such a vigorous and dogmatic heckling. However, I must refrain until I have read the gentleman's wide reading assignment. Besides, why should I give him ammunition? Meanwhile, I make one assignment of my own. I hope he will read all of the original article, not just part of it. Except in emotion, I doubt that we are as far apart as he thinks.

Max S. Marshall, University of California Medical School, San Francisco, Calif.

[For Dr. Marshall's original see the July 1951 issue of the Journal of MEDICAL EDUCATION, pp. 287-294.—Ed.]

Audiovisual News

An Atlas of Endoscopic Motion Picture Material in Broncho-Esophagology

Scientific observations carried out by endoscopic techniques of photography are not only more illuminating when they are made in motion, but curiously enough, they are easier to make. It is not surprising, therefore, that after Dr. *Chevalier Jackson* pioneered in direct laryngoscopy, bronchoscopy, and esophagoscopy, his student Dr. *Paul H. Holinger* should perceive the need for development of instruments for motion picture study of the ear, nose, larynx, bronchi and esophagus. Fourteen years of persistent labor and steady progress has resulted in a series of eight films which comprise an atlas of extremely valuable case shots. Students and teachers alike should have ready access to and familiarity with these often remarkable endoscopic case records.

Dr. Holinger began his labors in clinical photography in Chicago, in 1938. With Joseph D. Brubaker he built the first of the ingenious motion picture and still cameras designed to solve the peculiar problems of endoscopic cinematography: finding, focussing, lighting, fogging and masking. The technical obstacles solved, a steady flow of films assembled for teaching purposes has come from his hands. The collection of case footage has proceeded continuously, and a large number of cases have been accumulated to await possible incorporation into additional case films. This is probably the most extensive collection of motion picture case observations of the air and food passages available anywhere in the world.

In addition to motion pictures, many still photographs of interesting cases have been taken. It is worth pointing out that, although a considerable proportion of the cases presented by means of the motion picture are relatively static, there are at least three important gains achieved with cinematography. First, motion pictures show most dramatically the process of endoscopy itself, the movement of the instruments into the air and food passages. Second, the respiratory or peristaltic movements are seen, and such other body actions as may be pertinent, for example, movements of the vocal cords, the epiglottis, or the cardia, to mention a few. Third is the 3-dimensional effect always achieved with color cinematography.

Quite apart from the instructional value of the films, the almost routine collection of clinical motion picture footage has provided a large volume of film documentation on the observable facts of disease of the air and food passages. With the support of accurate observations described by other workers, a large part of the scientific contribution of this work has been in debunking commonly held views. However, notably in phonation, the original scientific contributions of the cinematography have also been significant. Moreover, Dr. Holinger has been engaged constantly in teaching, both at the University of Illinois College of Medicine as professor of broncho-esophagology, and in postgraduate instruction.

Early marked interest by the medical profession in the production of these films rapidly made the task of distribution burdensome. In 1945 the Jacques Holinger Memorial Fund was organized as a nonprofit corporation to further the development and handling of these audiovisual endeavors. The foundation publishes a film catalog and a leaflet which clearly describe its goals and assets, including officially and legally handling all development, production and distribution.

Motion picture and teaching organizations have recognized the significance of these films as a development of scientific cinematography. One film received the Grand Prize in the Scientific Division of the International Fine Arts and Film Festival held in Brussels in 1947. Another was awarded a Certificate of Merit by the American College of Surgeons in 1951. However, the eight assembled films have

shortcomings both as instructional material and as motion pictures. Further, they require a thoughtful and conscientious utilization in the classroom. Nonetheless they should probably become standard assets of all medical teaching institutions. The eight titles currently listed by the Fund are:

Diseases of the Ear, Nose and Throat	28 min.
Tumors of the Bronchi	15 min.
Diseases of the Esophagus	23 min.
The Infant Larynx	13 min.
Organic Disorders of the Larynx	24 min.
A Bronchoscopic Clinic	32 min.
Endoscopic Aspects of Diseases of the Trachea	20 min.
Foreign Bodies in the Air and Food Passages	25 min.

All films are silent and in color. They are obtainable for sale or rental through the Jacques Holinger Memorial Fund, 700 North Michigan Avenue, Chicago 11, Ill.

Detailed reviews of all eight films are available from the Medical Audio-Visual Institute. D.S.R.

Bell & Howell Presents New Tape Sound-on-Film Service

A new 16mm motion picture projector which records and plays back sound by means of a stripe of magnetic material on the edge of the film was announced on February 25 by the Bell & Howell Company of Chicago. The use of such systems, with or without optical tracks, is possibly the most important development in the recent history of audiovisual teaching aids. The Bell & Howell service is complete, including camera, film *Soundstripe* service, and sound projector.

The new 16mm cameras developed for the service accept single sprocket-hole film. Older Bell & Howell double sprocket cameras may be factory modified for $15.95. Single sprocket film can be "soundstriped" by the company at a cost of 3½ cents per foot. Such coating with magnetic iron can either be done at "full" width, where the tape sound is the only sound, or it may be half-striped, in cases where an optical sound track already exists. This latter method achieves the double resource of a fixed and a flexible narrative on the same film. The application of the *Soundstripe* can be made on either the emulsion of the base side of film, on Kodachrome, or on either black-and-white originals or duplicates.

The Bell & Howell Filmosound 202 Magnetic Recording Projector, at $699, permits routine sound film projection and also offers recording and playing of tape sound added by the instructor. The tape recording may be wiped and altered as often as is desirable, thus adapting it for different audiences. For about $60 extra a device is available making possible recording of voice and music.

Monitoring of the tape tracks can be achieved by earphones and recording can be done either at 16 or at 24 frames per second. The projector can, as usual, be linked with small, medium or power speakers, or it can be tied into a loud speaker system. Present Bell & Howell sound projectors can be modified for the new tape only at exorbitant cost.

It is obvious that this type of projector severely modifies all teaching concepts of the use of sound films. Now, every sound film can be personalized by an individual instructor. Every author-made or home-made film can become a flexible sound film and the usual expensive and interruptive titles may be eliminated. It may almost automatically be predicted that some of the prime objections to the classroom film in the medical school will disappear. It is possible that this development will be the key to discovery by the instructor of the potent language of the motion picture. Surely, every film now taken by the clinical photographer or surgeon will be shot on single sprocket sound film stock, for editing, magnetic coating, and later tape recording.

A few clouds remain on the horizon. For one thing there are several tape-on-film systems, as yet unstandardized for interchangeability. Demand will far outstrip production of equipment for many months, and many experiments must be carried through to show the powers and limitations of the new tool. But, nevertheless, a kind of revolution is here with these important developments.

A 3-Dimensional Atlas of Anatomy Makes Its Bow

A monumental undertaking in the teaching of anatomy is under way at Stanford University where Dr. *David L. Bassett*, as-

sociate professor of anatomy, and *William B. Gruber,* inventor of a simple modern stereoscope called "The Viewmaster", have begun a project which will consume the better portion of a decade and result in a stereo-atlas of human anatomy, in seven sections.

Dr. Bassett has shrewdly selected neuroanatomy, that most challenging and difficult of sub-specialties within anatomy, as the subject of the first section to be compiled and published. With Mr. Gruber he has painstakingly and skillfully prepared and photographed in color 238 related dissections of the central nervous system. Following issuance and trial over many months of a test volume with six circular cards of sample stereo views, Dr. Bassett and Mr. Gruber received an enthusiastic affirmation of the worth of their idea. They have gone to press with their first section of four volumes with 34 "reels". Meanwhile, they continue to labor on the immense task yet to do.

A stereo atlas is not new. Yet the anatomical and photographic skills involved, plus the new materials available today, give this effort a new stature. First, the stereoscope is simple and cheap, lending itself to individual ownership and ready use by students. Second, the relatively grainless kodachrome film makes possible the tiny stereo prints which rim the cards, the so-called "reels". Third, the small cards make possible volumes of small size. Fourth, modern clinical photography permits a dramatic quality of realism obtained through excellent lighting and color. Fifth, the stereo pictures can be seen by large groups of students by using a stereo-projector. However, polaroid glasses must be worn for such projection.

In summary, the splendid color, the small size of the books and "reels", the light weight of the viewer, the relative economy of all items, and the possibilities of personal ownership provide unique and convincing sales points for this new visual educational approach. The medical students of tomorrow's generation may well find themselves in permanent debt to this method, these books and pictures, but above all to Dr. Bassett and Mr. Gruber for their diligence and skill.

American Medical Films for the Medical Profession Abroad

Ever since the beginning of Medical Audio-Visual Institute operations in 1949, the U. S. Department of State has contracted with the Institute for selection of the professional medical motion pictures used to stock the U. S. Information Service film libraries abroad. Each year from thirty to forty new medical films are selected and added to the libraries, to be distributed to medical schools and medical groups of all kinds in those countries where film libraries are in operation.

The State Department considers medical films as one of the more important segments of its program to present the real United States to its fellow nations, a program aimed not only at the general public, but at such special interest groups as the medical profession as well. The profession is everywhere conceded to be an influential force in the formation of local opinion and reports to the State Department from abroad have indicated interest and enthusiasm for this transportable medical education from the United States.

Medical Television at University of Chicago

On January 9 a color television system was dedicated at Goldblatt Memorial Hospital of the University of Chicago Clinics. Following upon the University of Kansas pioneering development, the unit is the second medical teaching television apparatus to be installed in a medical center. A CBS-Remington Rand Vericolor system, it is now adapted for use in surgical teaching but will eventually be amplified to general medical teaching applications. Special features of the installation include a Wilmot-Castle lighting system and an inductive field communication system.

First Academic Degrees in Medical Illustration

The Medical College of Georgia is the first to award academic degrees of Master of Science and Doctor of Philosophy in Medical Art. Under Professor *Orville A. Parkes,* the department of medical illustration offers intensive courses for the training of a selected small student group each

year. The M.S. degree is awarded after two years of study with thesis; in addition, a certificate is given for a year's internship in the clinical specialties. The Ph.D. degree is awarded following further study and original contributions. It should be stated that Southwestern Medical College, Dallas, Texas, offers a graduate degree of Master of Medical Art.

Historical Film Section Established

A new historical film section has been established by the Davis and Geck Company in its Surgical Film Library. Films in the new section will be those from the main library which, while they have become obsolete, remain worthy of preservation and continued availability. Mr. *Carroll Adams,* vice-president of Davis and Geck, initiated the historical collection with 14 titles selected by a special Advisory Committee. Films were selected on the basis of their probable enduring interest to students of surgery, and are listed in the fall 1951 Film Library Catalog, Davis and Geck Company, 57 Willoughby Street, Brooklyn, New York. They will be distributed to professional groups on the same basis as the films in the general film library.

American Heart Association Completes Rubber Heart Models for Medical Training

The American Heart Association has just announced the availability of the first set of ten rubber heart models recently completed by sculptor *Abraham Belskie* of New York Medical College. Scientific guidance was given by an expert special committee of the Association, under the chairmanship of Dr. *J. Scott Butterworth,* associate professor of medicine of New York University Post-Graduate Medical School.

The first ten models are cast of latex rubber, and are mounted on bases. One of the models is mounted above a human diaphragm in rubber, thus providing accurate anatomical reference for the entire series. Three models represent normal hearts: average normal, transverse and vertical. Six models demonstrate cardiac pathologies: mitral stenosis, marked mitral stenosis, mitral stenosis with aortic regurgitation, aneurysm of the ascending limb of the aorta with aortic incompetence, hypertensive heart disease with a tortuous and sclerotic aorta, and chronic cor pulmonale. One model is a cast of the chambers of the heart and the lumina of the great vessels. A full set of ten is priced at $150. Individual models with diaphragm cost $22.50. All are available from the American Heart Association, 1775 Broadway, New York City.

Tentative plans have been made to produce a set of rubber teaching models which demonstrate congenital heart disease. If feasible, the series will be expanded later to include additional models of pertinent heart pathologies. The teaching potential of these durable and accurate mass-produced models is great. Very widespread distribution and utilization can be predicted.

Color in X-Rays: A New Visual Device for Teaching

Dr. *Everett L. Pirkey,* professor of radiology at the University of Louisville, has developed an interesting technique which appears to offer a substantial improvement in the application of roentgenograms to medical teaching. The method consists of differentially and selectively coloring x-ray films by means of Eastman Kodak Company's Flexichrome process. This employs special dyes used to tint black and white prints from which the silver salts have been removed. Coloring of prints is simple, speedy, yet precise. Every instructor in medicine who employs roentgenograms can readily color his films to achieve the contrasts necessary for clarification and interpretation of the often confusing x-ray shadows. Further development of the method, and widespread trials of use in the classroom will elaborate the values of this important new idea.

Maryland Increases Use of Audiovisual Teaching

A recent survey of teaching methods at the University of Maryland School of Medicine has indicated a tremendous increase in the use of audiovisual aids. For example, in embryology alone twenty-five silent and sound films were employed. Repeat showings were the rule, at the request

of the student. The expansion of the audiovisual aids library further indicates the growing interest in this type of teaching.

The Tele-Kit—a New Audiovisual Teaching Tool

A new portable projector for daylight, loop-repeating (continuous) projection has recently been made available to teachers. Called the Tele-Kit, the new unit is manufactured and marketed by Television Associates of Michigan City, Indiana.

The Tele-Kit has received exhaustive tryouts by the Instructional Film Research Program of Pennsylvania State College in experiments on repetition in learning. These experiments indicate that the device is not only representative of loop projectors as a class of teaching tool, but is also an important instrument for audiovisual instruction.

Audiences up to fifty persons can view the Tele-Kit screen. The Continuous Film Magazine, a special adapter arm and plastic magazine, can be used to convert a standard 16 mm. projector to continuous projection. Translucent screens for rear projection are also available, from other commercial sources.

The Pennsylvania State College observations were made primarily in the field of gross motor skills. Yet it is obvious that *any* teaching of cyclic or recurrent scientific phenomena would be well presented by loop projection. Medical school experiments with this projector system are clearly indicated, possibly in physiology, physical diagnosis, motor disorders and rehabilitation.

Summaries of Film Reviews

These brief notes on some motion pictures in oncology, orthopedics, neurosurgery and physical rehabilitation are intended to afford an offhand idea of the desirability and use of the film under review. They are drawn from the detailed evaluative reviews prepared by the Medical Audio-Visual Institute and available through the Association of American Medical Colleges. Anyone contemplating a showing of these films, as well as anyone looking to the production of similar or related films, would be well advised to obtain for study the detailed reviews.

The Vaginal and Cervical Smear

16 mm., color, silent, 1025 ft., 27 min. (to be projected at sound speed).

Year of Production: 1947; **Country of Origin:** U. S. A. **Sponsor and Producer:** Ortho Research Foundation; **Script and Direction:** Clair E. Folsome, M.D.; **Camera:** G. D. Richardson, R. Coduan. **Distribution:** Ortho Research Foundation, Graphic Arts Division, Raritan, N. J., **Loan.** Also available on loan from Professional Film Loan Library, American Cancer Society, 47 Beaver Street, New York 4, N. Y.

Summary: An instructional film dealing with the normal and abnormal cell patterns in female genital excretions and the technique of cytological diagnosis and its applications to the early detection of uterine cancer. Although technically accurate, the film has no clearly defined teaching goal, is inadequately organized and interpreted and static in presentation. Expert guidance is required when the film is shown to nonspecialist audiences.

Audience: Medical students (third and fourth years), gynecologists, nonspecialist postgraduate medical audiences, laboratory technicians.

Precancer Diagnosis of Cervix by Cytology

16 mm., color, sound, 1300 ft., 36 min.

Year of Production: 1947; **Country of Origin:** U. S. A. (produced in Canada). **Producer and Author:** J. Ernest Ayre, M.D., Director, Gyne-Cytology Laboratory, Royal Victoria Hospital, McGill University, Montreal, Canada; **Camera:** James Telper; **Cinemicrography:** C. G. Grand; **Photomicrography:** Peter Hayden, Harold Coletta. **Distribution:** Clay-Adams Company, Inc., 141 East 25th Street, New York 10, N. Y., **Sale:** $275; **Rental:** $10 per week; Professional Film Loan Library, American Cancer Society, 47 Beaver Street, New York 4, N. Y., **Loan.**

Summary: A film on the early detection of uterine cancer by means of cytological analysis, covering the morphology of normal and abnormal cell types, the technique of securing and mailing specimens, and correlated clinical, histological and cytological findings from a number of cases. The author's views and methods are placed in the foreground, especially with regard to the disputed concept of "precancer". The film is coherent in structure, generally clear in presentation, but rather overdone in its verbal and visual emphases.

Audience: Clinical pathologists, cytologists, gynecologists; also suitable for medical students (third and fourth years), interns, general practitioners and laboratory technicians, if used under expert guidance.

The Diagnosis of Uterine Malignancies

16 mm., color, sound, 475 ft., 13 min.

Year of Production: 1949; **Year of Release:** 1950; **Country of Origin:** U. S. A. **Sponsor:** National Cancer Institute of the U. S. Public Health Service, Federal Security Agency; **Authors:** Louis Schefley, M.D., Theodore P. Eberhard, M.D., and Warren Lang, M.D.; **Producer:** Department of Obstetrics and Gynecology, Jefferson Medical College. **Distribution:** Theodore P. Eberhard, M.D., Jefferson Medical College, 1025 Walnut Street, Philadelphia 7, Pa., **Sale:** $100; **Loan.** Also available on loan from the American Cancer Society, 47 Beaver Street, New York 4, N. Y.

Summary: This is an introduction to the basic procedures necessary for the detection of uterine cancer, including the pelvic examination, the taking of smears for cytological diagnosis, endometrial curettage and cervical biopsy. The procedures shown and discussed are thorough, well

performed and, with the exception of some points, standard. However, the film suffers from lack of analytical visual detail and prevalence of merely verbal information.

Audience: Medical students, general practitioners, student and graduate nurses.

Fractures: An Introduction

16 mm., color, 944 ft., 26 minutes.

Year of Production: 1948; **Country of Origin:** U. S. A. **Sponsor:** Johnson & Johnson Research Foundation; **Producer:** Eddie Albert Productions, Hollywood, for the American College of Surgeons; **Medical Supervision:** Harrison L. McLaughlin, M.D.; **Advisory Committee:** LeRoy C. Abbott, M.D., Guy A. Caldwell, M.D., R. Arnold Griswold, M.D., Paul B. Magnuson, M.D., and A. William Reggio, M.D.; **Script:** Ben Maddow; **Direction:** Sy Wexler; **Camera:** Olle Comstedt; **Animation:** Film Graphics, Inc.

Distribution: The Princeton Film Center, Princeton, N. J., **Sale:** Inquire, **Loan.**

Accompanying Material: A promotional pamphlet with color illustrations from the film is available. It is not designed as a teaching aid.

Summary: This is a splendidly produced survey of the fundamentals of fracture pathology, of some principles of treatment, and of many points of therapeutic procedure. The film is wide in scope, but does not follow a methodical and consistent pattern in treating its subject on a general level, often becoming lost in specific details. It is, nevertheless, of value as an adjunct for teaching and reviewing the subject.

Audience: Medical students, student nurses, physical therapists, interns, general practitioners.

Sciatic Pain and the Intervertebral Disc

(Navy Code No. MN-1966)

16 mm., color, sound, 936 ft., 26 min.

Year of Production: 1945; **Country of Origin:** U. S. A. **Producer:** U. S. Navy.

Distribution: United World Films, Inc., 1445 Park Avenue, New York 29, N. Y., **Sale:** $147.49, Navy Department, Bureau of Medicine and Surgery, Audio-Visual Training Section, Washington 25, D. C., **Loan.**

Summary: This superbly conceived and executed film is designed to orient the nonspecialist in the subject of acute rupture of the intervertebral disc and to outline for him his area of responsibility in dealing with the condition. Etiology, pathology, diagnosis and treatment are covered lucidly and concisely, and almost entirely in visual terms. Since a few aspects are overemphasized or oversimplified, expert interpretation should be provided when the film is shown to nonspecialist groups.

Audience: Medical students, nurses, physiotherapists, interns and residents of medicine and surgery, general medical audiences, orthopedists, neurologists, neurosurgeons.

Injuries of the Peripheral Nerves

16 mm., color, sound, 1100 ft., 31 min.

Year of Production: 1948; **Country of Origin:** U. S. A. **Sponsor:** Johnson & Johnson Research Foundation; **Producer:** Mervin W. LaRue, for American College of Surgeons; **Advisory Committee:** Claude C. Coleman, M.D., Winchell McK. Craig, M.D., Howard C. Naffziger, M.D., and Lewis J. Pollock, M.D.; **Direction:** Loyal Davis, M.D. and George Perret, M.D.

Distribution: The Princeton Film Center, Princeton, N. J., **Sale:** $145, **Loan.**

Summary: This film attempts to cover all aspects of the subject of peripheral nerve injury, including gross and microscopic anatomy, degeneration and regeneration of injured nerves, clinical manifestations, operative repair, postoperative care, and rehabilitation. The crowded and rapidly paced film has trouble making clear the broad outlines of its subject, and, in spite of authoritative sources, becomes unclear and even inaccurate in certain details. It should, however, be of some value for a wide range of medical audiences. Its showings should be guided by an expert on nerve repair.

Audience: General surgeons, military surgeons, general practitioners, residents, interns, medical students in their clinical years.

Resistive Exercises in Physical Therapy for Thoracoplasty

16 mm., color, sound, 928 ft., 26 min.

Year of Production: 1950; **Country of Origin:** U. S. A. **Producer:** Presentation Division for Department of Medicine and Surgery, Veterans Administration.

Distribution: United World Films, Inc., 1445 Park Avenue, New York 29, N. Y., **Sale:** $120.71; V.A. Central Office Film Library, U. S. Department of Agriculture, Motion Picture Service, Washington 25, D. C., **Loan.**

Summary: This is a description of the program of corrective physical therapy, as practiced at a Veterans Administration hospital for the purpose of minimizing postural deformities which may result from thoracoplasty for tuberculosis. It is produced with skill and succeeds in giving an informative general account of therapeutic teamwork in rehabilitation. However, in covering a large amount of material in too short a time, the film is of limited value as a source of specific technical information and creates a few misconceptions.

Audience: Physiatrists and physiotherapists, practicing and in training; nurses working with thoracoplasty patients; thoracic surgeons, chest specialists, general medical audiences, medical students.

On Our Own

16 mm., black-and-white, sound, 382 ft., 11 min.

Year of Production: 1949; **Country of Origin:** U. S. A. **Sponsor:** National Foundation for Infantile Paralysis; **Producer:** RKO-Pathe, Inc., with the cooperation of the New York State Rehabilitation Hospital, West Haverstraw, N. Y.

Distribution: National Foundation for Infantile Paralysis, Inc., 120 Broadway, New York 5, N. Y., **Sale:** at cost; **Loan.**

Summary: This simple film surveys steps in the successful rehabilitation of children and adolescents disabled by infantile paralysis. Designed for popular appeal, the film is general in approach but may be of value to technical audiences since it demonstrates the need, nature and feasibility of physical rehabilitation and illustrates effective training methods, as practiced by the New York State Rehabilitation Hospital.

Audience: General public; civic groups; patients and their families. Also of technical interest to physiotherapists in training, general practitioners, medical students, nurses and social workers.

Book Reviews

After careful consideration, the Journal Committee has decided that printing the book reviews unsigned will promote maximum objectivity. Reviewers will continue to be carefully selected, of course, for their special qualifications for reviewing particular books.

Internal Medicine—5th Edition

Its Theory and Practice. Originally edited by John H. **Musser**, B.S., M.D., F.A.C.P., Late Professor of Medicine, Tulane University of Louisiana, School of Medicine. 5th Edition edited by Michael G. **Wohl**, M.D., F.A.C.P., Associate Professor of Medicine, Temple University School of Medicine. 80 Contributors. Lea and Febiger, Philadelphia. 1951. 236 Text Illustrations; 10 Plates in Color. 1,563 pp., including Index. $15.00.

This new edition of a standard textbook of medicine has long been due. Its fourth edition appeared in 1944. Since that time the growth in medical knowledge has been so great as to necessitate a complete reorganization and rewriting of the subject matter in many areas.

The format has been changed to the popular two-column. The quality of the paper and type leave nothing to be asked. Furthermore, the illustrations are as new and as informative as the current press. Witness, for example, Figure 111, representing "Gigantism", which photograph is reproduced by the courtesy of Metro-Goldwyn-Mayer from the motion picture "King Solomon's Mines". In general, the cuts are as helpful as the photographs, as illustrative matter. Only occasionally, as in Figure 152. "Miliary Tuberculosis", the futile attempt to capture the details of the x-ray falls short of the high standard of illustration.

Perhaps the most effective addition to the new volume is the inclusion of more general topics introductory to the several parts and chapters. Without exception these elements are well developed and their subject matter clearly presented. The editor's personal attention to detail finds some disconcerting expressions in footnotes that are, in the main, supplementary to, yet at times critical of, the body of the text. The tabular differential diagnoses may have an adjunct function of summarizing information for the student. On the other hand, in several instances they smack of the old-fashioned syllabus, which is anathema to the medical educator.

The common consideration of preventive measures after the treatment of a given disease reflects medical thinking of our period. We are still interested in more and sicker patients even though we give lip service to the prophylaxis of disease. For pedagogical reasons, further editions might correct this implied differential in emphasis. The detachment of treatment from the disorder itself, as in the case of "Diseases of the Respiratory Tract", is somewhat disconcerting; but, in general, therapy receives splendid consideration throughout the text. Particularly commendable is the routine cross-reference within the subject matter to materials elsewhere treated.

In spite of the obvious attention to organization, there are several instances of duplication, as in "Coarctation of the Aorta" and "Sprue Syndrome". Typographical errors are singularly infrequent, but such lapses as "brething" (page 251), "principal" for *principle* (page 645) and "hypertention" (page 1075), will not escape the editor's notice again. Among the references on the "Common Cold", Kneeland's initial is "Y" and not "V". Austin Flint (page 779) should not be a hyphenated name.

Many familiar and distinguished contributors to the fourth edition do not appear in the current edition. Nevertheless the quality of the text maintains the high standard of its predecessors. The expedient of including the names of previous contributors with the revision of able successors serves no good purpose. The editor and publishers may be assured of a successful future for this textbook on its merits.

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A Textbook of Medicine

Edited by E. Noble **Chamberlain**; contents compiled by 13 contributors. The Williams and Wilkins Company, Baltimore. 1951. 266 Illustrations, some in Color. 962 pp. including Index. $10.00.

With the three best known American textbooks of medicine averaging nearly 1600 pages in their most recent editions, so that each has become a ponderous, heavy reference volume, it is refreshing to find a textbook of medicine of less than a thousand pages directed primarily at the undergraduate medical student.

Rather than make this volume a "comprehensive survey of the entire field of internal medicine", or endeavor to "encompass in a single volume an authoritative discussion of those diseases which comprise Internal Medicine", the contributors to this book indicate that they are disturbed by the increasing amount of factual knowledge expected of the medical student in his final examinations. They frankly express the hope that this book may enable a student to acquire adequate *basic* knowledge, serve as a springboard for wider reading, and, in conjunction with his clinical hospital experience, lay the foundation for the post of house physician.

The volume is well organized and, on the whole, well written. Emphasis has been placed on a clinical approach utilizing the basic and traditional methods of examination. However, the authors have incorporated in their proper perspective the established and essential laboratory and technical aids in medical diagnosis. De-

scriptions of diseases are concise, cleancut and designed to bring out the salient features of the disorder described with little emphasis on rare manifestations of disease.

The illustrations used are well chosen and useful adjuncts to the text. Some sections are oversimplified and inadequate. An example of this is observed in the section on diseases of the urinary tract where descriptions are meager and where the potentialities of the use of ACTH and cortisone in the treatment of nephrosis are not mentioned.

It is the reviewer's opinion that this volume serves the purpose of presenting a general survey of medicine to the undergraduate medical student. However, because of its oversimplification and brevity it is inadequate as a basic reference textbook in medicine.

Human Biochemistry—3rd Edition

Israel S. **Kleiner.** Ph.D., Professor of Biochemistry, New York Medical College. The C. V. Mosby Company, Saint Louis. 1951. 83 Text Illustrations, 5 Color Plates. 695 pp., including Index. $7.00.

In order to meet the rapid advance in the biochemical and nutritional fields within the past three years, the author has advisedly effected considerable changes in practically every chapter of the third edition as contrasted with the second edition. These changes were particularly needed in discussions on mineral metabolism, water balance and the general topics concerned with equilibria in blood and body fluids, with respect to oxidations and reductions in energy metabolism. These topics have been given careful re-editing to cover the new material.

New tables, charts and figures have been included in an effort to visualize the subject matter better, and the distribution of this new material is in excellent conformity with the text material. There has been considerable increase in the number of pages in the text, an inevitable consequence of the rapidly growing information on energy exchange, radio-isotopes and the general application to clinical medicine of material previously considered only of theoretical interest.

The author wisely has included as the second chapter in this text an excellent discussion of physical chemistry and its application as an introduction to the broad field of biochemistry.

The format of the new edition is very attractive and pleasing to the eye; the type is clear; charts and figures are well done. The text is very readable and the organization of material in general carefully thought out.

This third edition of *Human Biochemistry* should serve as a most acceptable text for instruction in medical biochemistry, giving as it does at one and the same time a foundation for the understanding of the fundamentals and a stimulus for additional studies through collateral reading and investigation.

An Inaugural Discourse on Medical Education

Delivered at the Opening of The Medical College of Ohio in Cincinnati, November 11, 1820. Daniel **Drake.** M.D., President. With an introduction by Emmet Field **Horine.** M.D. Henry Schuman, New York City. 1952. Frontispiece. Edition limited to 500 Copies.

Dr. Drake's discourse, delivered early in the 19th century at the opening of the second medical college in what was then the American west, is remarkable in many respects. At a time when physicians were being created almost by fiat, this man was setting down a specific program which, had it been adopted, would have raised the standards of medical education long before the issuance of the Flexner report. Dr. Drake called for systematic premedical study in the humanities, for the study of botany, zoology and mineralogy, for a knowledge of classical languages on the part of beginning medical students. He saw the necessity for disciplined study of the preclinical as well as the clinical sciences, and he had an excellent understanding of their integrative relationships. He believed that a teaching hospital was an absolute essential for any school of medicine. His realization that physicians needed to study what he called "mental physiology" was far-sighted indeed; the clear exposition he makes of the ramifications of general practice is equally profound.

The book, as printed, is obviously intended for special consideration from bibliophiles. With a limited printing, beautiful binding and paper stock, it is unfortunate that the make-ready does not meet the other high standards of production. Nevertheless, the content of the book is excellent.

Funds and Foundations

Their Policies Past and Present. Abraham **Flexner;** with the collaboration of Esther S. **Bailey.** Harper & Brothers, New York. 1952. 146 pp. including Index. $2.75.

Dr. Flexner's new book is both strong and brilliant. With great economy of means he reviews the history of foundations, firmly fixes their place in modern culture, and states his beliefs on what their policies must be if they are to achieve their goals.

He conceives of large foundations as stimulators of activity on the part of the entire commonwealth. He shows that there are certain large areas where only intelligent action on a grand scale can give the necessary impetus; once the impetus is given, it is time for the foundations to withdraw to other frontiers. Thus, for example, he cites the reforms in medical education. First, a necessary job of surveying was done to find the need. Then large scale, intelligent action in a few key institutions acted as an inevitable stimulus for generalized action throughout the nation. His five criteria for judging medical schools, those which he himself applied so notably in 1910, are well worth repeating:

First, the entrance requirements. What were they? Were they enforced?

Second, the size and training of the faculty.

Third, the sum available from endowment and fees for the support of the institution, and what became of it.

Fourth, the quality and adequacy of the laboratories provided for the instruction of the first

two years and the qualifications and training of the teachers of the so-called preclinical branches.

Fifth and finally, the relations between medical school and hospitals, including particularly freedom of access to beds and freedom in the appointment by the school of the hospital physicians and surgeons who automatically should become teachers.

Dr. Flexner objects to what he calls "retail" or "peanut" business on the part of large foundations. In his belief the dispensation of hundreds of small grants in the past twenty years has been almost totally a waste of funds. He points out that most of the objectives were vague, and that the foundations were not staffed adequately to know whether all of the many proposed investigators were men with ideas, or even if the projects performed ever really accomplished anything.

He believes firmly in wisely placed endowment funds; funds which do not terminate themselves while leaving obligations behind them no one else can fulfill. As he sees it, the two major areas where foundations have great tasks to perform at the present time are in the field of humanities, because he thinks that science has been "oversold"; and in refinancing the nation's medical schools on a sound endowment basis.

One of his aphorisms might be used as a guidepost in determining the relationship of the art and the science in modern medical practice. "The scientist," Dr. Flexner says, "must find out what happens, and with the ceaseless pursuit of that object he has fulfilled his proper function. It is for the humanist to say whether from the standpoint of individual or social good the uses to which men put knowledge are or are not wholesome and constructive."

An Atlas of Normal Radiographic Anatomy

Isadore **Meschan**, M.A., M.D., Professor and Head of the Department of Radiology, University of Arkansas School of Medicine; with the assistance of R.M.F. **Farrer-Meschan**, M.B., B.S. (Melbourne, Australia). W. B. Saunders Company, Philadelphia & London. 1951. 1044 Illustrations on 362 Figures. 593 pp., including Index. $15.00.

This is a very well organized and well presented text. An especially useful feature of the book are the sketches indicating the position of the subject when the x-ray in question was taken. In cases where the radiograph will need still further interpretation to students, there are also accompanying line drawings of landmarks to be noted in the film. Medical students will find the book valuable for learning radiographic anatomy, and as a useful adjunct in basic anatomy. Because each shot is not only sketched, but also is clearly described in the text, x-ray technicians will find the book an excellent teaching and reference source. Special praise must be given to the index, which is clearly set up and where important references are set off in bold face type.

X-Ray Interpretation—2nd Edition

H. Cecil H. **Bull**, M.A., M.B., M.R.C.P., Honorary Consulting Radiologist to the Royal Waterloo Hospital, London, and the General Hospital, Southend-on-Sea. With a chapter on Radiography of the Head by James W. D. **Bull**, M.A., M.B., M.R.C.P., D.M.R., Radiologist, Maida Vale Hospital for Nervous Diseases. Geoffrey Cumberlege, Oxford University Press, London, New York. 1951. 287 Illustrations. 406 pp., including Index. $5.50.

The second edition was originally printed in 1935, was popular throughout the war years, and has since been generally unavailable until this most recent printing. While it is a text about x-ray interpretation it does not contain reproductions of radiological plates. All of the numerous illustrations are original line drawings by the author. The first obvious advantage of this system is the cost reduction effected in the printing bill. The second is that, for undergraduate medical students, it could well be simpler to use these drawings as a basic guide, helping them to know what to expect when they view the actual plates. The author has taken pains to stress the normal appearance of things, as well as the pathological, giving students a reference point from which to proceed. The book is obviously not intended for radiologists, but is well suited to student use.

Diseases of the Ear, Nose, and Throat

A Textbook of Clinical and Laboratory Procedures. Georges **Portmann**, M.D., Professor of Otorhinolaryngology, University of Bordeaux, Dean of the School of Medicine and Pharmacy, University of Bordeaux. Translated by Fernand **Montreuil**, M.D., and Jules G. **Waltner**, M.D., College of Physicians and Surgeons, Columbia University. The Williams and Wilkins Company, Baltimore. 1951. Profusely Illustrated. 728 pp., including Index. $20.00.

Professor Portmann in his preface expresses the feeling that there is a keen need for a book of "Clinic Technic" in his specialty. This volume is his attempt to supply the need. His point of view in preparing the volume is best expressed by himself: "The physician's power of observation, his diagnostic sense, his intelligence and psychological approach, I would even say humane approach, in taking the patient's history still remains fundamental." The book, then, is a clinical guide. In treating various conditions, Dr. Portmann begins by describing the normal, with considerations of anatomy and physiology, then proceeds to pathological states, using his introductory discussions as foundations. Illustrations which accompany the text are appropriate and well-handled. The discussions by the author of the use of diagnostic and therapeutic instruments is good.

Fluid Balance

A Clinical Manual. Carl A. **Moyer**, M.D., Professor of Surgery, Washington University School of Medicine, Saint Louis. The Year Book Publishers, Inc., Chicago. 191 pp. including Index. $3.75.

Dr. Moyer's avowed intention was to present a "simple practical scheme of diagnosis pertaining to fluid and electrolyte imbalances which can serve as a practical guide to the tentative selection of appropriate therapeutic measures." He has done somewhat more than this. His introductory chapter is a brief review of the history of the field; he has presented a number of interesting case reports; his bibliographies, not com-

prehensive by his own admission, are nonetheless, more adequate than might be expected in a little volume with such a modest aim. The chapter on "Clinical and Laboratory Signs of Changes in Fluid Volume and Osmolar Concentration" is especially helpful. The book will be of interest and value to medical students in either their undergraduate or postgraduate years. An excellent little volume.

The Thyroid

Thomas Hodge **McGavack**, B.A., M.D., F.A.C.P., Professor of Clinical Medicine, New York Medical College; Director of the New York **Medical College**, Metropolitan Hospital Research Unit. With a section of Surgery by James M. **Winfield**, B.A., M.D., F.A.C.S., Professor and Director of Surgery, New York Medical College and Walter L. **Mersheimer**, B.S., M.D., F.A.C.S., Associate Professor of Surgery, New York Medical College; and a section on History by Dorothy B. **Spear**, Ph.B., Librarian and Thomas Hodge McGavack. Illustrated. The C. V. Mosby Company, Saint Louis. 1951. 646 pp. including Index and Bibliographies. $13.50.

This splendid monograph is divided into four sections; history; anatomical, chemical, and physiological considerations; morbid states; surgical considerations. Each of these is done with great care, both as to attention to detail and to a concern that the presentation will be, at the same time, readable and authoritative. The bibliographies, one for each section, altogether constitute nearly a thousand references. Undergraduate students will probably use the book mainly as a reference; researchers will find it indispensable.

Experiments in Biochemistry

Max S. **Dunn**, Ph.D., Professor of Chemistry, University of California at Los Angeles; and William **Dreil**, Ph.D., Research Fellow, California Institute of Technology. McGraw-Hill Book Company, Inc., New York. 1951. 197 pp., including Index. Contains Data Sheets for 46 Experiments. $5.00.

The authors state that this manual is designed for students in beginning biochemistry. The experiments included will have little interest or value for medical students on the undergraduate level. The manual is intended primarily for the biochemistry major. It is a handsome production, and has the value of being well indexed and of containing a bibliography of over 900 references to original and review literature.

Essentials of Histology—2nd Edition

Margaret M. **Hoskins**, Ph.D. and Gerrit **Bevelander**, Ph.D., New York University. The C. V. Mosby Company, St. Louis. 1952. With 135 Text Illustrations and 2 Color Plates. 240 pp., including Index. $4.00.

As an auxiliary manual this book will have its uses for medical students. Although few color plates are used, nevertheless the authors have included a greater number of diagrammatic sketches, many of which would be helpful in providing landmarks to students examining slide sets. It is not a basic text in histology; the correlation with other fields, physiology for example, is done only superficially.

Diagnostic Bacteriology—4th Edition

A Textbook for the Isolation and Identification of Pathogenic Bacteria. Isabelle Gilbert **Schaub**, A.B., Technical Director, Clinical Bacteriology Laboratories, The Johns Hopkins Hospital; and M. Kathleen **Foley**, M.A., Instructor in **Bacteriology, Department** of Biological Sciences, College of Notre Dame of Maryland. The C. V. Mosby Company, Saint Louis. 1952. 356 pp. including Index. $4.50.

The book began, in its 1940 edition, as a small laboratory manual. It is now a larger laboratory manual, containing many explicit directions for the practical contingencies to be encountered in a bacteriology laboratory. The information given is practical and covers preparations, stains, cultures, sterilization techniques, special techniques for particular organisms, and the specific addition to this 4th edition, a section on methods for determination of the sensitivity of bacteria to antibiotics. Medical students in their clinical years may wish to use this book for reference, or to recall the principles involved in a particular test. However, the book is written primarily for technicians. Bacteriology theory is avoided.

The Genetics of Micro-organisms

D. G. **Catcheside**, Reader in Plant Cytogenetics, University of Cambridge, Fellow of Trinity College, Cambridge. Pitman Publishing Corporation, New York 19, New York. 1951. Illustrated. 223 pp. including Index and Bibliography. $4.50.

This book, the second volume in the Pitman "Microbiology" series, is based on a course of lectures devised for biochemists specializing in the microbial aspects of their subject. Chapters deal separately with yeasts, protozoa, bacteria and viruses and with the interrelationships of adaptation and mutation; mutation and gene action; and sexual reproductive systems. It is unlikely that the average medical student will be prepared for material dealt with in this book. The author has, as he stated, written a monograph for specialists. In the bibliography, a short statement is included about the field each reference covers.

Formulary and Therapeutic Guide

The Formulary of the New York Hospital. R. Gordon **Douglas**, Chairman; Donald A. **Clarke**, Secretary; Assisted by a Committee of Nine. Appleton-Century-Crofts, Inc. 1951. 355 pp. including Therapeutic Index.

This little book is the latest revised version of the New York Hospital Formulary and is intended to serve as a guide to all physicians who treat patients, either on the hospital's inpatient services or in the clinics. The main body of the book is composed of a list of drugs, arranged alphabetically, which are considered sufficient for the proper treatment of patients under normal circumstances. Naturally the list is a wide one, but not nearly so wide as the inclusion of proprietary products would have made it. Medical students could use inspection of such a formulary as this as an excellent lesson in the necessity for reasoned and responsible dispensing of drugs, both for the patient's welfare and in the interests of hospital economy.

Hospital Staff Appointments of Physicians in New York City

Hospital Council of Greater New York. The Macmillan Company, New York. 1951. 57 Tables, 13 Charts. 151 pp. including Index. $3.25.

This brief book will be of great interest to all medical educators and to the leaders of medical societies in any of the larger cities in the nation. Here is presented a careful statistical study of the pattern of hospital appointments in the nation's largest city, and the considered judgments of a thinking body of citizens, physicians and others, as to how this pattern affects physicians and the public whom they serve. Chapters on the affiliations of the Negro physician and the general practitioner are of particular pertinence. Also worth careful consideration is the list of specific recommendations made by the council as a result of this survey.

Proceedings

National Advisory Committee on Local Health Units. 4th Annual Meeting. New York, December 6, 1951. National Health Council, 1790 Broadway, New York 19, New York. 42 pp. Available on request.

This report of the proceedings at the Advisory Committee on Local Health Units recent meeting in New York is both interesting and heartening. Using the recent renaissance of interest in Pennsylvania as guidepost, the conference pointed out that local interest was the key to improved health services. When the people of a community know what health service is, they will demand it.

Included in the "Proceedings" is a "Progress Report of the Development of Full-Time Local Health Departments in the United States". It shows that there were 1,228 municipal, county and multi-county health departments on July 1, 1951.

An Analysis of the Multi-Test Clinic

of Richmond, Virginia. Walter E. **Boek**, Director of Research, Health Information Foundation; Assisted by Jean K. **Boek**, Research Associate. Health Information, New York 17, New York. 1951. 2 Figures, 66 Tables. 267 pp. Paper bound, $1.50.

For public health workers interested in the feasibility of instituting multiple screening clinics, this monograph will be invaluable. A careful study of the program carried on in one city, Richmond, Virginia, where the plan was well conceived, well integrated and thoroughly analyzed, there is much information here presented in a clear and well-organized way.

German-English Medical Dictionary

Louis **De Vries**, Professor of Modern Languages, Iowa State College; and 16 Medical Collaborators. McGraw-Hill Book Company, Inc., New York. 1952. 586 pp. $12.00.

This is a handsome and readable dictionary, compiled with care and with the cooperation of sixteen eminent collaborators. There are more than 40,000 entries, ranging widely into various of the medical specialties. For students with at least a college-level grasp of the language it will make the translation of German scientific (especially medical) papers much easier. The typography is well done.

Liver Injury

Transactions of the 10th Conference, May 21-22, 1951, New York, New York. Edited by F. W. **Hoffbauer**, M.D., Department of Medicine, University of Minnesota Medical School. Josiah Macy, Jr. Foundation, New York. 320 pp. $3.75.

This conference program was divided into five parts, each part covering one of the following topics: serum proteins and lipids; mechanism of action of lipotropic factors in animals and man; experimental ischemia of the liver and hepatic coma; microanatomy of the hepatic vascular system and the effect of insulin on the liver in normal and diabetic man; and liver disease in Jamaican children. The printed report contains numerous plates and tables.

Renal Function

Transactions of the 2nd Conference, October 19-20, 1950, New York, New York. Edited by Stanley E. **Bradley**, Department of Medicine, College of Physicians and Surgeons, Columbia University. Josiah Macy, Jr. Foundation, New York. 1951. 178 pp. $3.00.

The topics of discussion at this conference were pituitary and adrenal cortical influences on renal function. Specific problems attacked were adrenal cortical hormone and related hormones in water metabolism; antidiuretic factors; the excretion of sodium in relation to glomerular filtration; and endocrine factors in the utilization of glutathione, among others.

Adrenal Cortex

Transactions of the 2nd Conference, November 16-17, 1950, New York City. Edited by Elaine P. **Ralli**, Department of Medicine, College of Medicine, New York University. Josiah Macy, Jr. Foundation, New York. 1951. 209 pp. $3.00.

The conference began with a paper on "The Present Status of the Chemistry of ACTH", delivered by Choh Hao Li. Other papers presented were "Regulation of Pituitary Adrenocorticotropic Activity", George Sayers; "The Relation of the Adrenal Cortical Hormones to the Hypersensitive State", Thomas F. Dougherty; "Hyaluronidase and the Adrenal Cortical Hormones", Jeanette Opsahl; and "Further Clinical Studies with ACTH and Adrenal Cortical Hormones", George W. Thorn. These papers were the starting points for lively interchanges, all adequately recorded, between the many expert participants of the conference.

Problems of Aging

Transactions of the 13th Conference, February 5-6, 1951, New York City. Edited by Nathan W. **Shock**, Chief, Section on Gerontology, National Heart Institute, National Institutes of Health and the Baltimore City Hospitals, Baltimore, Maryland. Josiah Macy, Jr. Foundation, New York. 1951. Illustrated. 194 pp. $4.00.

Topics under discussion at this conference included endocrine aspects of aging; cardiovascular aspects of aging; aging of the integumentary sys-

tem; the biology of cell division; and a summary of activities of Federal agencies. The 35 participants were drawn from a wide variety of fields of specialization, including education, social work, psychiatry, sociology and the various specialties in the biological sciences. Discussions were recorded.

The Education of Man

Heinrich **Pestalozzi.** Philosophical Library, New York. 1951. 93 pp. $2.75.

This is a small book of aphorisms which deal with Mankind and Humanity, The Individual, The Education of Man, Man among Men, Justice and Liberty, Truth and Wisdom, Nature, the World, and God, etc. This is a tall order for 93 pages. Some of the statements have an air of banality, others are thought provoking: (politics). . . . *Mankind in the mass has no virtues; only the individual has them. The state as such has none: it merely has the power to use the virtues of its individual members. . . . The man who forever complains gives little thought to how he could do better; he always looks to others, or even to the Government. Does such a man really love his country?* (education). . . . *The higher purpose of education is to prepare the individual to make free and self-reliant use of all the faculties with which the Creator has endowed him, and so to direct these faculties that they may perfect human life . . . teaching is by no means the essence of education. It is love that is its essence . . . from which the essentials of education flow.*

Problems of Consciousness

Transactions of the 2nd Conference, March 19-20, 1951, New York, New York. Edited by Harold A. **Abramson,** M.D., Department of Physiology, College of Physicians and Surgeons, Columbia University. Josiah Macy, Jr. Foundation, New York. 1951. 178 pp. $3.25.

The papers presented were "Consciousness: A Psychopathological and Psychodynamic View", David Rapaport; "Variations in the Scope of Awareness", Gregory Zilboorg; and "Variations in States of Awareness in Schizophrenic Patients", David Wright. An interesting aspect of this volume is the introduction, in which the 21 participants introduce themselves. The scope and range of interests is impressive and interesting, though by no means easy reading.

Psychotherapy with Schizophrenics

A Symposium. Monograph Series on Schizophrenia No. 3. Edited by Eugene B. **Brody,** M.D., Assistant Clinical Professor of Psychiatry, Yale University School of Medicine; and Frederick C. **Redlich,** M.D., Professor and Chairman, Department of Psychiatry, Yale University School of Medicine. With 13 Contributors. International Universities Press, Inc., New York. 1952. 246 pp. including Index. Bibliographies by Chapter. $4.00.

Not for undergraduate courses in psychiatry, the book could nevertheless provide a powerful stimulus to students with a desire to pursue psychiatry further. The papers presented in this symposium constitute a thought provoking, often profound, review of this field as it stands today. Besides the editors, 13 others contributed. In addition, many references are given, providing readers with a tool for further reading. An extremely comprehensive treatment of this topic.

Problems of Infancy and Childhood

Transactions of the 4th Conference, March 6-7, 1950, New York, New York. Edited by Milton J. E. **Senn,** M.D., Departments of Pediatrics and Psychiatry, School of Medicine, Yale University. Josiah Macy, Jr. Foundation, New York. 1951. 181 pp. $2.50.

Three papers and the discussions which followed them constitute the basis of this interesting volume: "Cultural Determination of Parental Attitudes: The Relationship Between the Social Structure, Particularly Family Structure and Parental Behavior", delivered by George Peter Murdock, Yale department of anthropology, and John W. M. Whiting, Harvard department of anthropology; "A Consideration of Some Problems in the Ontogeny of Family Life and Social Adjustment in Various Infrahuman Animals", T. C. Schneirla, department of animal behavior, The American Museum of Natural History; and "Working Toward Healthy Personality," Lawrence K. Frank. The latter paper was prepared with financial support and on invitation of the Josiah Macy, Jr. Foundation for use as source material by the fact finding committee of the Midcentury White House Conference. Recommended for all those interested in this area of investigation.

Family Centered Maternity and Infant Care

Supplement 1 to Problems of Infancy and Childhood, Transactions, Fourth Conference, 1950. Edited by Edith B. **Jackson,** M.D., Departments of Pediatrics and Psychiatry, Yale University School of Medicine, New Haven, Conn.; Genevieve **Trainham,** R.N., M.A.; Director, Infant Growth Laboratory, Merrill-Palmer School, Detroit, Mich.; with the Assistance of Members of the Rooming-In Committee. Josiah Macy, Jr. Foundation, New York. 1950. 29 pp. 25c.

This is a report of the Committee on Rooming-In of the Josiah Macy, Jr. Foundation Conference on Problems of Infancy and Early Childhood. It defines and discusses 'rooming-in' which simply means a hospital arrangement to care for the mother and her baby together, within the same space unit. There is a brief history of rooming-in in the U.S. and a list, arranged chronologically, of the hospitals that have begun rooming-in. In the opinion of this reviewer, this list is entirely too short. There may be good reasons why rooming-in may not be good for all mothers. There are *not* sufficient reasons why rooming-in should not be available to every mother who wishes it, in a hospital within reach and means of pocket-book. (For example, even though Chicago Lying-In Hospital is listed as having begun rooming-in service, there is no hospital in Chicago where this service is available, at this date.) Section III of this report discusses "Questions for Research"; these are followed by a 39-item bibliography.

Symposium on the Healthy Personality

Transactions of Special Meetings of Conference on Infancy and Childhood June 8-9 and July 3-4, 1950, New York. Edited by Milton J. E. **Senn**, M.D., Departments of Pediatrics and Psychiatry, School of Medicine, Yale University. Josiah Macy, Jr. Foundation, New York. 1950. 298 pp. $2.50.

Again including the discussions which followed and were interwoven with the papers, this volume presents the results of the June and July meetings of the Conference on Infancy and Childhood. The first paper was "Growth and Crises of the Healthy Personality" presented by Erik H. Erikson. "Constitutional and Prenatal Factors in Infant and Child Health", M. F. Ashley Montagu, Rutgers department of anthropology, and "Toward a Social Psychology of Mental Health," Marie Jahoda, Research Center for Human Relations, New York University, followed. An essential volume on a vital topic.

The Battle for Mental Health

James Clark **Moloney**, M.D. Philosophical Library, New York. 1952. Chapter References. 105 pp. including Index. $3.50.

The author, a psychoanalyst, writes passionately of the need for a return to more permissive practices in rearing children. He is a stout advocate of rooming-in obstetrical practices. The writing itself lies somewhere between the popular article and the professional monograph.

Infant Development

The Embryology of Early Human Behavior. Arnold **Gesell**, M.D. Harper & Brothers Publishers, New York. 1952. Illustrations from Accompanying Film. 108 pp. including Index, Book and Film References.

Dr Gesell's latest volume portrays the patterning of prenatal and infant behavior. Its purposes are multiple: to orient workers in child welfare to a developmental approach; to formulate principles of developmental diagnosis; to outline growth mechanisms and interpret the significance of a developmental outlook on the problems of child care. The book is brilliantly illustrated by still pictures taken from the film, "The Embryology of Human Behavior", recently made by the Medical Audio-Visual Institute of the Association of American Medical Colleges in cooperation with the Bureau of Medicine and Surgery and Office of Naval Research, Department of the Navy. By including the entire narrative of the film, and fifty odd scenes, one senses that the motion picture itself is a thoroughly fine job, of which its makers can be proud.

Infant Care

Children's Bureau Publication No. 8, Federal Security Agency, Social Security Administration, Children's Bureau. 1951. 145 pp., including Index. Government Printing Office, Washington 25, D. C. 20c. Discounts if ordered in quantities.

This manual first appeared in 1914 and has appeared in successive editions ever since. More than 28,000,000 copies have been distributed. The present volume, widely rewritten, is an excellent compendium of knowledge for new parents, covering almost every aspect of care for infants up to the age of one year. It is attractively printed for so reasonably priced a publication, and the writing is pitched at a level almost any parent will be able to understand.

The Retarded Child

A Guide for Parents and Teachers. Herta **Loewy**. Philosophical Library, New York. 1951. 160 pp. $3.75.

The author, apparently from a long period of time spent in teaching retarded children, has evolved a system of educating them which is based on close individual attention, affection, and allowing the child a measure of responsibility as soon as he is capable of assuming it. Written with vigor, if not grace, it will be of interest to physicians, even those who may not agree with all its tenets, and to educators.

Care of the Medical Patient

A Textbook for Nurses. Margene O. **Faddis**, R.N., M.A., Professor of Medical Nursing, Frances Payne Bolton School of Nursing, Western Reserve University; and Joseph M. **Hayman**, Jr., B.A., M.D., Professor of Medicine, School of Medicine, Western Reserve University. McGraw-Hill Book Company, Inc., New York. Illustrated. 654 pp. including Index. Bibliographies by Chapter. $4.50.

Like most texts for nurses the emphasis here is on the practical rather than the theoretical. In fact, the strongest points of the book are in the sections dealing with specific nursing skills and with the ways in which the nurse can act most efficiently as the physician's adjunctive worker. The discussions of diseases are limited, of necessity, though a very great number are included. Indeed, the volume is a very long one and, though very well done, a thorough reading will require high motivation from the nurse to whom it is dedicated. Typography, layout, and writing style are good.

Speech Training

A Handbook for Students. A. Musgrave **Horner**. Lecturer on Speech Training, Stranmillis Training College, Belfast. Philosophical Library, New York. 1951. 176 pp. $3.75.

This book is a short, non-controversial practical manual, with exercises, for the average person wishing to improve his level of intelligibility. Theory is minimal. Its application to problems of speech pathology must be decided by the individual teacher; the main value will be for persons who want to help themselves to speak more effectively.

Nursing in Ohio

A History. James H. **Rodabaugh** and Mary Jane **Rodabaugh**. The Ohio State Nurses' Association, Columbus, Ohio. 1951. 18 Illustrations. 273 pp. including Index. $4.00.

An interesting book written by two competent historians, the story here presented may be read for its intrinsic interest or may be considered as the social document it really is. Beginning with the nursing care, or lack of it, that existed when Ohio was still frontier, the story carries through the second World War and ends with interesting speculations about the future development of the profession.

Rehabilitation Nursing
Alice B. **Morrissey**, B.S., R.N., Supervisor of Nursing Service, Department of Physical Medicine and Rehabilitation, Bellevue Hospital. Foreword by Howard A. **Rusk**, M.D., Professor and Chairman, Department of Physical Medicine and Rehabilitation, New York University-Bellevue Medical Center. G. B. Putnam's Sons, New York. 1951. Illustrated, References by Chapter. 299 pp. including Index. $5.00.

An excellent effort is made here, not only in instructing nurses in the most practical aspects of care for the disabled, but in motivating them for this kind of vocation. Two-thirds of the book are devoted to clear exposition, accompanied by adequate illustration, of the many nursing procedures to be followed in restoring a measure of self-sufficiency to the disabled. The first third of the book is a heartening essay on the need for rehabilitation nursing, its history, and the wonderful results to be gained for the patients.

Physical Rehabilitation for Daily Living
Edith **Buchwald**, M.A., A.R.P.T., Director of Rehabilitation Courses for Physical Therapists, Institute of Physical Medicine and Rehabilitation, New York University-Bellevue Medical Center. In Collaboration with Howard A. **Rusk**, M.D., Professor and Chairman, Department of Physical Medicine and Rehabilitation; George G. **Deaver**, M.D., Professor of Clinical Physical Medicine and Rehabilitation; and Donald A. **Covalt**, M.D., Associate Professor, Physical Medicine and Rehabilitation, New York University-Bellevue Medical Center. McGraw-Hill Book Company, Inc., New York. 1952. Profusely Illustrated with Photographs. 183 pp. including Index. $7.50.

This book outlines teaching methods for the basic exercise and daily activities for patients with disabilities of the lower extremities, based on the program developed at the New York University Institute of Physical Medicine and Rehabilitation. Written in non-technical language, it is equally useful for physicians, therapists, nurses and patients. In fact, because the program outlined is concerned with mastering the activities of daily living, many patients will peruse this book and have new hope. The text serves to tie together and amplify a very specific routine already made clear by the splendid illustrations.

PDR—Physicians' Desk Reference—1952
To Pharmaceutical Specialties and Biologicals. 6th Edition. Medical Economics, Inc., Rutherford, New Jersey. 1952. 632 pp.

This year's PDR contains over 5,000 pharmaceutical specialties and biological products and over 1,800 of the more important products used in practice. There is a host of information, ranging from reviews of dosages and therapeutic indications to listings of films and pamphlets available from various pharmaceutical manufacturers. A quotation from the preface: "it should be understood that the publisher is not advocating the use of any product listed by any manufacturer or attempting to influence the therapeutic practices of any physician. PDR is a reference index."

Books and Pamphlets Received

As space permits, those with the greatest interest to our readers will be reviewed.

A Course in Practical Therapeutics
2nd Edition. Martin Emil **Rehfuss**, M.D., F.A.C.P., Professor of Clinical Medicine and Sutherland M. Prevost Lecturer in Therapeutics, Jefferson Medical College; Alison Howe **Price**, A.B., M.D., Associate Professor of Medicine, Jefferson Medical College; and 17 Contributors. The Williams & Wilkins Company, Baltimore. 1951. Profusely Illustrated. 938 pp., including Index. $15.00.

Biological Antagonism
The Theory of Biological Relativity. Gustav J. **Martin**, Sc.D., Research Director, The National Drug Company, Philadelphia. The Blakiston Company, Philadelphia. 1951. 64 Figures; 44 Tables. 516 pp., including Index. $8.50.

Pharmacopoea Internationalis—1st Edition
Volume I. Bulletin of the World Health Organization Supplement 2. World Health Organization, Palais des Nations, Geneva. 1951. Also available in French and Spanish editions. 406 pp., including Index. $5.00.

The Will to Live
Arnold A. **Hutschnecker**, M.D., Thomas Y. Crowell Co., 278 pp., $3.50.

Facts for You
A Study on Annual Reports. P. O. Box 1259, YMCA, Tampa 1, Florida. $1.00.

Static Electricity in Hospital Operating Suites
Direct and Related Hazards and Pertinent Remedies. P. G. **Guest**, V. W. **Sikora** and Bernard **Lewis**. United States Department of Interior, Bureau of Mines, Washington, D. C. 1952. 64 pages.

A Textbook of Clinical Neurology—7th Edition
With an Introduction to the History of Neurology. Israel S. **Wechsler**, M.D., Clinical Professor of Neurology, Columbia University. W. B. Saunders Company, Philadelphia & London. 1952. 179 Figures. 801 pp. $9.50.

Functional Neuro-Anatomy—2nd Edition
A. R. **Buchanan**, M.D., Professor of Anatomy, University of Colorado School of Medicine. Lea & Febiger, Philadelphia. 1951. 273 Illustrations, 19 in Color. 323 pp. including Index and Bibliography. $7.50.

1st Annual Report on Stress—1951
Hans **Selye**, M.D., Ph.D.(Prague), D.Sc.(McGill), F.R.S.(Canada), Professor and Director of the Institut de Medicine et de Chirurgie experimentales, Universite de Montreal. Acta, Inc., Medical Publishers, Montreal, Canada. 1951. Illustrated. 511 pp. including Index, plus 133 pp. of References. $10.00.

Callander's Surgical Anatomy—3rd Edition
Barry J. **Anson**, M.A., Ph.D., Professor of Anatomy, Northwestern University Medical School, and Walter G. **Maddock**, M.S., M.D., F.A.C.S., Elcock Professor of Surgery, Northwestern University Medical School. W. B. Saunders Company, Philadelphia & London. 1952. 929 Illustrations. 1074 pp. including Index. $14.00.

The Child in Health and Disease—2nd Edition
A Textbook for Students and Practitioners of Medicine. Clifford G. **Grulee**, M. D., Rush Professor of Pediatrics, University of Illinois College of Medicine; and R. Cannon **Eley**, M.D., Assistant Clinical Professor of Pediatrics, Children's Hospital, Chil-

dren's Medical Center, Harvard Medical School. 87 Contributors. The Williams & Wilkins Company, Baltimore. 1952. Profusely Illustrated, some in Color. Separate References. 1255 pp. including Index. $15.00.

Pathological Histology—4th Edition

Robertson F. **Ogilvie.** M.D., D.Sc., F.R.C.P.Ed., F.R.S.E., Senior Lecturer in Pathology and Assistant in Forensic Medicine, University of Edinburgh. Foreword by A. Murray **Drennan.** M.D., F.R.C.P.Ed., Professor of Pathology, University of Edinburgh. The Williams & Wilkins Company, Baltimore. 1951. 295 Photomicrographs in Color. 506 pp. including Index. $8.00.

Heart Disease—4th Edition

Paul Dudley **White.** M.D., Executive Director, National Advisory Heart Council; Recently Clinical Professor of Medicine, Harvard Medical School. The Macmillan Company, New York. 1951. Copiously Illustrated. Bibliographies by Chapters. 1015 pp. including Index. $12.00.

Cybernetics

Circular Causal and Feedback Mechanisms in Biological and Social Systems. Transactions of the 7th Conference, March 23-24, 1950, New York, New York. Edited by Heinz **Von Foerster,** Department of Electrical Engineering, University of Illinois; Assistant Editors, Margaret **Mead,** American Museum of Natural History, and Hans Lukas **Teuber,** Department of Neurology, New York University College of Medicine. Josiah Macy, Jr. Foundation, New York. 1951. 251 pp. including References. $3.50.

Connective Tissues

Transactions of the 2nd Conference, May 24-25, 1951, New York, New York. Edited by Charles **Ragan,** Department of Medicine, College of Physicians and Surgeons, Columbia University. Josiah Macy, Jr. Foundation, New York. 1952. 190 pp. $3.50.

Biological Antioxidants

Transactions of the 5th Conference, November 30-December 1, 1950, New York, New York. Edited by Cosmo G. **Mackenzie,** Department of Biochemistry, University of Colorado School of Medicine. Josiah Macy, Jr. Foundation, New York. 229 pp. including Cumulative Index. $3.75.

Training in Clinical Psychology

Transactions of the 1st Conference, March 27-28, 1947, New York, New York. Chairman: Dr. Lawrence S. **Kubie;** Editor: Dr. Molly R. **Harrower.** Josiah Macy, Jr. Foundation, New York. 88 pp. $1.50.

Nerve Impulse

Transactions of the 2nd Conference, March 1-2, 1951, New York, New York. Edited by David **Nachmansohn,** M.D., Department of Neurology, College of Physicians and Surgeons, Columbia University. Josiah Macy, Jr. Foundation, New York. 1951. 204 pp. $3.50.

Metabolic Interrelations

Transactions of the 3rd Conference, January 8-9, 1951, New York, New York. Edited by Edward C. **Reifenstein,** Jr., M.D., Oklahoma Medical Research Institute and Hospital. Josiah Macy, Jr. Foundation, New York. 1951. Illustrated. 294 pp. $4.00.

Conference on Metabolic Aspects of Convalescence

Transactions of the 17th Meeting, March 29-30, 1948, New York, New York. Edited by Edward C. **Reifenstein,** Jr., M.D. Josiah Macy, Jr. Foundation, New York. 246 pp. $4.00.

Factors Regulating Blood Pressure

Transactions of the 5th Conference, February 15-16, 1951, New York City. Edited by Benjamin W. **Zweifach** and Ephraim **Shorr,** Department of Medicine, Cornell University Medical College. Josiah Macy, Jr. Foundation, New York. 1951. 238 pp. including Cumulative Index. $3.75.

Blood Clotting and Allied Problems

Transactions of the 4th Conference, January 22-23, 1951, New York City. Edited by Joseph E. **Flynn,** Department of Pathology, College of Physicians and Surgeons, Columbia University. Josiah Macy, Jr. Foundation, New York. 1951. 272 pp. $4.00.

Review of Literature on Therapeutic Nutrition. Reprinted by The Stuart Company for distribution to the medical profession. From a preliminary report prepared by the National Research Council for the Medical Research and Development Board, Department of Defense. 1951. 47 pp. including Bibliography.

National Tuberculosis Association Annual Report. April 1, 1950 to March 31, 1951. 103 pp.

Columbia University Bulletin of Information. 51st Series, No. 42, November 3, 1951. Report of the Dean of the Faculty of Medicine for the Academic Year ending June 30, 1951. Columbia-Presbyterian Medical Center, New York 32, New York. 112 pp.

1st Annual Report—1950-1951. The National Association for Mental Health, Inc., New York 19, New York. 24 pp.

1st Annual Report—1950-51 of the National Science Foundation. U. S. Government Printing Office, Washington 25, D. C. For sale by the Superintendent of Documents. 31 pp. 20c.

The Theory of the Microscope. James R. Benford, Head of the Microscope and Telescope Department, Bausch & Lomb Scientific Bureau. Bosch & Lomb Optical Company, Rochester 2, New York. 1951. Illustrated. 21 pp.

Something Can Be Done About Chronic Illness. Public Affairs Pamphlet No. 176. Herbert Yahraes. Public Affairs Pamphlets, New York 16, New York. 32 pp. 25c.

World Health Organization Technical Report Series No. 42—Report on the 1st Session of the Alcoholism Subcommittee. 24 pp. 15c. No. 43—Expert Committee on the International Pharmacopoeia, Report on the 8th Session; including Report on the 2nd Session of the Subcommittee on Non-Proprietary Names. 36 pp. 25c. No. 44—Joint FAO/WHO Expert Committee on Nutrition, Report on the 2nd Session. 64 pp. 40c. No. 45—Prevention and Treatment of Severe Malnutrition in Time of Disaster. 56 pp. 35c. All of the above are available from International Documents Service, Columbia University Press, New York 27, New York; or directly from the World Health Organization, Palais des Nations, Geneva, Switzerland.

Chronicle of the World Health Organization. October 1951, Vol. 5, No. 10. 20c. Availability same as four pamphlets listed above.

State University of New York 4th Annual Report of the Board of Trustees. January 29, 1952. 17 pp. plus 5 Appendices.

Man to Man. 1775 Broadway, New York 19, New York.

Midwest Inter-Library Corporation and the Midwest Inter-Library Center. 2nd Annual Report, from July 1, 1950 to June 30, 1951. The Midwest Inter-Library Center, Chicago 37, Illinois.

General News

Home Care Plan Successful

The February 1952 *Chronic Illness Newsletter* contains an interesting story about the Philadelphia experiment in home care for chronic patients which has been conducted in the Germantown and Chestnut Hill sections for the past two years.

Called the 'Intensive Home Care Program', the plan got its start when a Health and Welfare Council survey reported that 50 percent of the chronic patients in the metropolitan area could be well cared for in their own homes if certain needed services were provided. To demonstrate the truth of this judgment, the Visiting Nurse Society set up the plan with the approval of the Philadelphia County Medical Society. The Starr Centre Association, a voluntary agency, cooperated in the development of the program.

Patients in the Philadelphia plan remain under the care of their own physicians, who refer them and continue to order therapy. When patients are unable to pay, or to continue payment, the program pays the fees, in order to maintain the physician-patient relationship.

After a physician has referred a patient, by filling out the referral form with all pertinent information, the patient is visited by the medical consultant of the plan and the nurse coordinator. They assess the overall situation, decide whether or not the patient will be acceptable. When they have made their decision, the patient's physician is informed. The physician continues to give monthly reports on the patient's progress, indicating any changes in treatment or prognosis. The plan staff maintains regular contact with the doctor. Every three months current cases are discussed at evaluation conferences, with all persons working on a case present.

The Philadelphia plan provides comprehensive services under the direction of the patient's own physician and under the supervision of a coordinator. Beside nursing service, there are available physiotherapy, occupational therapy, speech therapy, x-ray, laboratory service, travel to and from hospitals and clinics, and a number of other services. Average cost per day to the community has been about $3 per patient. Physicians in the area are using the plan increasingly. One of the cooperating hospitals estimated that home care permitted discharge of 17 patients who no longer needed specialized hospital care and were using beds needed for acute patients, saving the hospital about 500 hospital patient days in 22 months.

* *

Medical Public Relations Seminar Scheduled

A meeting of medical school Public Relations personnel is scheduled as part of the annual meeting of the American College Public Relations Association, to be held at the Hotel Carter, Cleveland, April 16-18, 1952. *Marc G. Waggener,* chairman of the ACPRA's medical section, who attended the 62nd annual meeting of the AAMC, urges the deans to cooperate with the recommendation of their own Committee on Public Information, to the effect that medical schools support the medical seminar section by sending their representatives to the April meeting of the American College Public Relations Association.

* *

Research Society Reports Progress

The National Society for Medical Research reported excellent progress during 1951 at its sixth annual meeting in Chicago on February 10. Five states adopted affirmative laws relating to animal experimentation. Two states, South Dakota and Oklahoma, passed pound laws, while Wisconsin strengthened its already existing pound regulation. Three more states, Arkansas, Arizona and Mississippi, will have pound laws introduced in their next legislative sessions.

Seventeen organizations were added to the roster of member associations, bringing

the total to 274. To help these organizations and the cause of medical research, the National Society is now preparing a series of publications explaining various scientific, ethical, legal and moral aspects of the program.

Dr. *Anton J. Carlson* and Dr. *Andrew C. Ivy* were re-elected president and secretary respectively.

Association of American Colleges Takes Stand on UMT

The following resolution was adopted at the annual meeting of the Association of American Colleges on January 10, 1952. A copy of the resolution has been sent to each member of Congress, explaining the Association's official position on Universal Military Training:

Recognizing the continuing crisis through which civilization is passing, the Association of American Colleges at its thirty-eighth annual session pledges anew its support of all measures necessary to maintain a free and democratic world.

Currently, military security demands that we place great emphasis upon preparation for work in technological fields, upon constant planning for industrial mobilization, and upon the unending improvement of weapons and military methods. We recognize that military policy must provide for swift adjustments between periods of acute crisis which demand large standing forces and periods of relative calm which require smaller standing forces, but a large trained and ready reserve. We therefore reaffirm the resolutions relative to human resources adopted at our last meeting under the title of "Declaration on Manpower."

At the same time it is our conviction that our ultimate security depends upon development of the United Nations, the international regulation and reduction of armaments, the exchange of persons under the Fulbright and other Acts, financial and technical aid to disadvantaged peoples, and the promotion of democratic principles throughout the world. We therefore urge support of these and similar measures, now and in the years immediately ahead, which give hope for the establishment of world law and order.

In view of the substantial hope which these non-military activities and developments hold out, we believe that to concentrate the national effort on their success is more likely to bring security in the long run than consideration of military procedures. We are therefore much concerned over the pending proposal to establish a National Security Training Corps which would permanently provide, even in peaceful times, a compulsory universal military training program.

Since the Selective Service program appears to meet our present demands for military forces and since the inauguration of UMT at this time would actually detract from the supply of available manpower (one "overhead person" being needed under UMT for each two trainees), we are strongly opposed to this legislation, on the basis that it is both unnecessary and undesirable. When and if more stable world conditions are established, ample opportunity can be provided for full discussion of whether or not UMT has any place in a long-range program of national security. Currently to embark upon a program of UMT, essentially a permanent peacetime measure, rather than to invest our time, thought and effort on behalf of immediate military demands and on behalf of those developments of a non-military character which offer greatest hope of permanent peace is to dissipate energy and to court national disaster.

We cannot fail to point out that UMT as a permanent policy is likely to be fantastically expensive, educationally undesirable, morally hazardous, and politically dangerous. Only the complete failure of all other measures designed to secure the peace could justify serious consideration of UMT. Until it becomes obvious that these other non-military measures are fruitless, we urge their complete support and at the same time urge the Congress to defeat the present bill authorizing the establishment of a National Security Training Corps.

New Education Chief Named

Howard Kline was recently named chief of education and training, division of international health, U.S. Public Health Service, to replace *Henry R. O'Brian. Henry C. Niblack* continues as fellowship program director.

21 Appointed to Advisory Councils

Appointment of 21 new members to the seven National Advisory Councils of the U. S. Public Health Service was announced on January 22. The 12 member councils review applications for research grants and make recommendations to Surgeon General Scheele.

Included in the list of new members to the councils were Dr. *Charles E. Smith*, professor of public health, University of California at Berkeley; Dr. *Ward Darley*, vice-president of the University of Colorado and director of the Medical Center; Dr. *Edward L. Turner*, dean of the University of Washington School of Medicine; Dr. *Joseph Barach*, medical director of University clinics, University of Pittsburgh; Dr. *Joseph Aub*, professor of research med-

icine, Harvard Medical School; and Dr. *W. Edward Chamberlain,* professor of radiology, Temple University School of Medicine.

Diagnostic Fund Recommended

Dr. *Charles H. Loughran,* at his recent installation as president of the Kings County (New York) medical society, recommended the establishment of a nonprofit fund to provide laboratory care for low income patients. Dr. Loughran suggested that each of the society's 3,700 members set aside a very small part of his yearly profits for such a fund. He pointed out that a $100 subscription from each Kings County physician would mean an annual fund of $370,000.

There would be two primary advantages to the system, Dr. Loughran said. The first would be that the provision of low cost diagnostic care for patients who must otherwise turn to municipal or charitable sources, would avert what he called "a real threat to continued private practice". The second would be that young radiologists and pathologists would be encouraged to enter practice who otherwise might not.

Medical Society Hits Bias

The Medical Society of the County of New York, at its regular meeting on January 28, adopted a resolution condemning racial discrimination in hospital staff appointments, with recommendations on positive action to help eliminate the problem.

The meeting also passed a resolution supporting the use of dogs and cats from public pounds to provide medical schools with experimental animals for research on a humane, rigidly controlled basis. Several other resolutions were also considered favorably during the meeting. The New York society is the largest county medical society in the nation.

VA Official Resigns Post

On February 6 Dr. *E. H. Cushing,* assistant chief medical director of the Veterans Administration announced his resignation, effective immediately. In his brief letter of resignation, Dr. Cushing did not give his reasons for leaving, but it was said that he made them clear in a private conference with Vice Admiral *Joel T. Boone,* VA medical chief.

It is believed that the differences between Dr. Cushing and Adm. Boone centered about the apparent slowing down of the agency's program of instruction for interns and residents. Adm. Boone expressed surprise at Dr. Cushing's resignation. In a reply to the latter's letter the medical chief said he regretted that "you no longer see fit to continue as a member of the team."

Dr. Cushing's resignation was followed by an announcement that his position had been filled by the appointment of Dr. *George Marshall Lyon.* Dr. Lyon was founder and director of the VA's radioisotope research program.

Rehabilitation Traineeships Available

The National Institute of Neurological Diseases and Blindness now has funds available for traineeships in the field of rehabilitation. Training will be conducted in recognized rehabilitation centers throughout the country. All inquiries should be addressed to Dr. *Pearce Bailey,* Director, National Institute of Neurological Diseases and Blindness, National Institutes of Health, Bethesda, Maryland.

British Health Plan Modified

A bill imposing charges for National Health Service was published by Britain's Conservative government on February 1. Certain classes of persons, expectant mothers, veterans with service connected disabilities, will be exempt from the new charges. Anyone trying to claim exemption fraudulently will be subject to a penalty of 100 pounds, or three months imprisonment, or both. This is the first time any penalties have been provided in the Health Service.

The proposed new charges will consist of a shilling fee for prescriptions, a maximum fee of one pound for dental treatment, half the cost of wigs, hearing aids, surgical boots and shoes, surgical corsets and elastic hosiery. In addition there will be charges for the use of day nurseries within the discretion of local authorities

and a charge up to twelve shillings daily for private rooms in hospitals.

* *

Rural Health Conference Held

The 7th National Conference on Rural Health was held in Denver, on February 29 and March 1. Delegates at the conference consisted, as has been customary, of doctors, educators and leaders in the rural communities and in farm organizations. Speakers included *Robert Stearns,* president of the University of Colorado; Dr. *Charley J. Smyth,* director of graduate education, University of Colorado; and Dr. *Albert C. Yoder,* Goshen, Indiana, who was recently voted general practitioner of the year.

* *

Medical Help Program Instituted

CARE, at the request of the World Health Organization, has launched a new program designed to procure medical supplies for areas of the world where the need is critical. Now underway as the initial project is a $60,000 campaign to establish an "Iron Lung Bank" in Asia. The funds will cover purchase and delivery costs for 30 respirators, at $2,000 each. Ten respirators will be deposited in each of three hospital centers in Tokyo, Bangkok, and probably Cairo. They will be on call for any area stricken by an epidemic of polio.

Contributions in any amount to the Iron Lung Bank, CARE, 20 Broad Street, New York, or any local CARE address, will help provide the respirators as "A gift from the American people". Should an organization or individual donate the complete cost of a respirator, delivery will be made in the name of the donor.

* *

World Health Organization News

In its program of promoting improved medical education throughout the world, WHO has been asked by several countries, among them Pakistan, India, the Philippines, Iran and Singapore, to obtain professors for two or more years in anatomy, physiology, pharmacology and pathology. There is also a position open as principal of a medical college in India, for which persons with experience in administration of medical schools are eligible. Persons interested in any of these positions may write directly to the World Health Organization, Geneva, Switzerland, for further details.

The Pan-American Sanitary Bureau reported that, at the close of 1951, there were 71 health programs in operation throughout the Americas. Thirty-eight others are in various stages of negotiation.

* *

Planned Parenthood Grants Announced

The Planned Parenthood Federation of America is offering grants for basic research relating to problems of human fertility, including infertility and conception. The grants are being made available through the federation's Robert L. Dickinson Research Memorial. Applicants should address the Robert L. Dickinson Research Memorial, Planned Parenthood Federation of America, 501 Madison Avenue, New York 22, New York.

* *

Foreign Fulbright Scholars Listed

Lists of visiting scholars from abroad receiving travel grants under the Fulbright Program for 1951-52 are now available from the Committee on International Exchange of Persons. A total of 357 travel grants have been made, with about 45 more applications in process of review. These figures represent a 25 percent increase over the previous academic year. There are now more foreign scholars coming to the United States than there are United States scholars going abroad, although many of the foreign scholars remain here for shorter periods of time.

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Research Grants Announced

The American Heart Association has awarded 37 investigatorships and research fellowships totaling $185,650 in the field of heart disease. The awards, first of this year's allocations from public contributions to the 1951 Heart Fund, provide for studies to be made during the twelve months beginning next July. Within the next few months additional awards in the form of grants-in-aid to institutions will be an-

nounced by the Association to round out the fourth successive year of its national research support program in the cardiovascular field.

National Science Foundation Grants Made

The National Science Foundation on February 8 announced approval of 28 research grants averaging more than $14,500, for a total of $410,000. The total is slightly less than 40 percent of funds available to support basic science research for the current fiscal year. All of the grants announced were in the fields of the biological sciences.

Included in the grants was one for study of the components of blood under the direction of Dr. *Britton Chance,* Johnson Foundation for Medical Physics, University of Pennsylvania; $37,100 for a three year study. Dr. *Manfred M. Mayer,* Johns Hopkins School of Hygiene and Public Health, was the recipient of a three year grant for $41,400, for a study of cytotoxic reactions mediated by antibody and complement.

Hospital Arouses Controversy

A great deal of controversy was aroused recently when St. Francis Hospital, a 200 bed institution in Poughkeepsie, New York, delivered a 72 hour ultimatum that seven of its attending physicians either sever connections with the Duchess County League of the Planned Parenthood Association or resign from the staff.

Of the seven physicians involved, four were Jewish and three were Protestant. All of them were also affiliated with Vassar Brothers Hospital, the largest in Poughkeepsie with 300 beds. Four of the doctors refused to resign either from the federation or from the hospital. Of the three who resigned from the federation, one of them said that he did it so as not to jeopardize the health of four patients he was attending at St. Francis. He added that after these patients were discharged, he would probably tender his resignation to the hospital.

The physicians planned an appeal to the county medical society, and through the local group, to the AMA. They also sent a letter of protest to hospital authorities. Several ministerial groups protested the action.

The Right Rev. *Michael P. O'Shea,* dean of the Roman Catholic clergy in Duchess County, defended the position taken by the hospital. In his defense of the action Msgr. O'Shea said, "Everyone knows where the hospital stands on the question of birth control. St. Francis Hospital has been, is and always will be open to people of all races, colors and creeds. Everyone knows where the hospital stands and the doctors should know. People who have donated funds to the hospital knew when they made their donations where the hospital stands on the question of birth control."

Conference Announcements

National Health Council—March 13-14, Hotel Roosevelt, New York.

Aero Medical Association—March 17-19, Statler Hotel, Washington, D. C.

American Association of Anatomists—March 19-21, Providence, R. I.

American Academy of General Practice—March 24-27, Atlantic City, N. J.

American Congress on Obstetrics and Gynecology—March 31-April 4, Netherland Plaza Hotel, Cincinnati, Ohio.

American Association of Railways Surgeons—April 1-3, Chicago, Ill.

American College of Allergists—April 7-9, William Penn Hotel, Pittsburgh, Pennsylvania.

American Association of Pathologists and Bacteriologists—April 10-12, New York.

American Society for Experimental Pathology—April 14-18, New York.

American Surgical Association—April 16-18, White Sulphur Springs, W. Va.

American Heart Association—April 17-20, Hotel Statler, Cleveland, Ohio.

American Association of Industrial Physicians and Surgeons—April 21-24, Cincinnati, Ohio.

American College of Physicians—April 21-25, Cleveland, Ohio.

American Dermatological Association—April 23-26, Colorado Springs, Colo.

American Trudeau Society—May 26-31, Hotel Statler, Boston, Massachusetts.

3rd Commonwealth and Empire Health and Tuberculosis Conference—July 8-13, Central Hall, London, England.

International Congress of Physical Medicine—July 14-19, London, England.

The Personnel Exchange

To aid in solution of the problem of faculty vacancies, MEDICAL EDUCATION *will list persons and positions available, as a free service. The school, department, or person may have the option of being identified in these columns or of being assigned a key number for each position listed. Mail addressed to key numbers will be forwarded to the person or department listing the request.*

Information for these columns must reach the Journal office not later than the 10th of the month preceding publication. The deadline for the May issue will be April 10.

All mail should be addressed to: MEDICAL EDUCATION, *185 N. Wabash Avenue, Chicago 1, Illinois.*

Faculty Vacancies

Full time Assistant *Pathologist* to enlarge Attending Staff, Medical College of Virginia. Good salary, concomitant with experience. Arrangements for consultation practice. Teaching opportunities. Write: Dean of Medicine, *Medical College of Virginia,* Richmond, Va.

Assistant professor of *Pathology;* beginning July 1, 1952. Duties: Teaching of medical and dental students, research, and participation in autopsy and surgical pathological program of teaching hospital. Qualifications: M.D., and two years in pathologic anatomy, or demonstrated ability in research. Salary depends on qualifications. Address inquiries to Professor of Pathology, *Medical College of Alabama,* Birmingham, Alabama.

Pathology staff vacancy beginning July 1952 for young pathologist with interest in teaching, and research experience in a field such as cardiovascular disease, gerontology, endocrinology, pathologic physiology, or protein chemistry. New facilities in reorganizing department. Opportunity for increase in rank and salary. Please address inquiries to Chairman, Pathology Department, *University of Kansas Medical School,* Kansas City 12, Kansas.

Resident and Assistant Resident in *Clinical Pathology.* Approved for entire training, 900 bed hospital, modern equipment, laboratory performs 1000 plus tests daily. Research facilities available, own teaching and research programs. Complete maintenance including room, board, laundry, medical care; plus stipend. Contact Director, Department of Clinical Pathology & Hospital Laboratories, *Medical College of Virginia,* Richmond 19, Virginia.

Associate Professor or Professor of *Biochemistry* in a two-year medical school. Appointment to begin June 15 or not later than September 1, 1952. Teaching experience and a developed interest in research required. Address inquiries to Dean, School of Medicine, *University of Missouri,* Columbia, Missouri.

M.D. or equivalent to assist, eventually be responsible for, research in applied *respiratory* and *cardio-respiratory* physiology at mid-western medical school. Opportunity for graduate work toward advanced degree. Studies correlated with nationally integrated program. Contact with outstanding physiologists. Requires ability to present studies at national meetings. Give details of background in correspondence. Address: V-2, MEDICAL EDUCATION.

Personnel Available

M.D. desires position as assistant professor of *Radiology.* Experience includes certification in both roentgen diagnosis and radiotherapy including supervoltage therapy; clinical teaching, research and publication. Available January 1, 1952. Address: A-4, MEDICAL EDUCATION.

Pathologist: Professor of Pathology with many publications. Opportunity to develop pathology of cancer by autopsy and surgical specimen studies and by histochemistry. Requirements: medical school connection; privilege of fee collection on private patients or other equitable arrangement; specified minimal income. Address: A-5, MEDICAL EDUCATION.

Man, age 30, Ph.D. in June 1952, with major in *parasitology,* minor in *bacteriology* and *immunology;* desires position with future in teaching and/or research. Experience in teaching and in the diagnosis of intestinal parasites. Sigma Xi and professional societies. Excellent references. Address: A-6, MEDICAL EDUCATION.

Anatomist, long teaching experience. Now associate professor. Publications, admissions committee experience. M.S., M.A., Ph.D. Desires teaching, research or administrative duties where promotions are possible. Available June 1952. Address: A-7, MEDICAL EDUCATION.

Assistant or Associate professor; Ph.D., two years medical school. Numerous publications; awarded two fellowships. Qualified to teach *biochemistry* or *physiology,* especially steroid chemistry and endocrinology. Available September 1952. Salary specification. Address: A-8, MEDICAL EDUCATION.

Personnel Available (Continued)

Ph.D. desires position in *Anatomy* department. 16 years teaching experience in anatomy, embryology, histology in undergraduate and graduate fields. Research and publications in radiation effects and cancer. Address: A-9, MEDICAL EDUCATION.

Physiologist: Ph.D. Age 40. Associate Professor of physiology in state university. Current research on mammalian temperature regulating mechanisms. Research and teaching experience in undergraduate, graduate and medical school physiology departments. Desires permanent position in medical school. Available September 1, 1952. Address: A-10, MEDICAL EDUCATION.

Physiologist: Man, 36, married, two sons. M.S., Ph.D. candidate, August 1952. Major: Zoophysiology. Minor: Chemistry. Desires teaching and research opportunities in medical school physiology. Five years college teaching; human physiology, histology, microbiology, general zoology. Two years Army medical laboratory; 1½ years industrial chemistry. Currently research associate, American Cancer Society project, (fat metabolism). Available September 1952. Address: A-11, MEDICAL EDUCATION.

Surgeon: Teaching and/or basic research, essentially full time. Completing fellowship medical film utilization and production March 1, 1952. M.D., C.M. McGill '40. Other training: rotating internship, residency plastic surgery (Board eligible). Wide experience includes Army (Board of Surgery 2 years credit), VA (plastic surgery, pathology, diagnosis) and general practice. Address: A-12, MEDICAL EDUCATION.

Internist: Certified, 20 years teaching experience in classroom, clinic and at bedside. Clinical research and administration. 60 publications. General and specialty practice. Seeks teaching opportunity as head of department of medical school, hospital or clinic. Available September 1952. Address: A-13, MEDICAL EDUCATION.

M.D. and Ph.D. in *physiology*. Just completing training requirements for Boards in *internal medicine*. Teaching and research experience. Age 33. Family. Desires academic position where basic science and clinical interests in teaching, research and practice may be fulfilled. Joint appointment in medicine and physiology preferred. Address: A-14, MEDICAL EDUCATION.

Parasitologist: Man, Ph.D., married. Assistant professor of medical parasitology at present. Desires position with teaching and research in medical or general parasitology. Minor work in bacteriology or zoology. 1½ years experience as assistant professor, 2 years graduate teacher, 3½ years Army parasitologist-bacteriologist. Address: A-15, MEDICAL EDUCATION.

Man, 36, married. M.S., Ph.D., *microbiology*, large eastern university. Desires teaching and research, department responsibilities, school of medicine or university. Experience teaching general and medical bacteriology, and related subjects, direction of graduate students. In present position, with school of medicine, 5 years. Will also consider summer session only, 1952. Available 1 June, 1952. Address: A-16, MEDICAL EDUCATION.

Talented A-V Men Wanted

The Medical Audio-Visual Institute is searching for a few young physicians or medical scientists who have shown talent and interest in visual education. Such men have generally demonstrated their talents as artists, camera enthusiasts and occasionally as writers.

On the Medical Audio-Visual Institute staff the status of the new personnel will be that of fellows in visual education. They will undergo formal and informal training in the skills of visual communication, while participating actively in the work of the organization. Placement after training will depend upon the nature of the skills of the particular person; there are many positions existent and to be created in the medical teaching centers. Salaries in the Institute will be determined according to prior experience and training in medicine, teaching and visual education.

For further information write to Dr. David S. Ruhe, Medical Audio-Visual Institute, 2 E. 103rd Street, New York 29, N. Y.

College News

Medical College of Alabama

A United States Public Health Service grant to the section of oncology in the department of medicine has been continued for the third year. The amount of the renewal is $3,500.

University of Arkansas

Dr. *Katharine Dodd* has been appointed professor and head of the department of pediatrics, effective March 1. Dr. Dodd was formerly associate professor of pediatrics at the University of Cincinnati and a member of the staff of the Children's Hospital Research Foundation. She replaces Dr. *William A. Reilly* who has accepted a position as chief of the radioisotope laboratory of the VA Hospital, San Francisco.

University of Buffalo

One of the principal features of the Niagara Frontier Convocation sponsored by the University in December was the laying of the cornerstone for the new medical-dental school building. The new edifice will cost, on completion, approximately $4,500,000, slightly less than half of which is now on hand. Chancellor *T. Raymond McConnell*, in his remarks at the ceremony, called the building "a tribute, a symbol and a monument".

Another feature of the convocation was a symposium entitled "What Progress in Health in the Next Fifty Years?", in which Dr. *Charles Gordon Heyd*, past president of the AMA and Dr. *William S. McCann*, professor of medicine at the University of Rochester were among the participants. Dr. McCann held that "Pure science is the firm rock on which we must build." He went on to say that "When we venture to predict what fruits research may bestow upon us in the next 50 years, we must realize that everything depends upon what we do now. The benefits which you will enjoy 25 years and 50 years from now will derive from the pure research that is done today and which will be done 35 years from now."

There have been two recent appointments in the department of pediatrics. Dr. *Charles Upton Lowe* has been named associate professor of pediatrics and research pediatrician in charge of laboratories at Children's Hospital. Dr. *Loren G. MacKinney* has been appointed instructor in pediatrics and director of the outpatient department of Children's Hospital.

University of California, L. A.

Dr. *Raymond B. Allen* has been named chancellor of the University of California at Los Angeles. Dr. Allen retired as president of the University of Washington on December 31 and accepted appointment as head of the Government's Psychological Strategy Board. He will assume his duties as chancellor during the summer. Dr. Allen has been president at the University of Washington since 1946. In his new post Dr. Allen will report to university president, Dr. *Robert G. Sproul*, rather than directly to the regents of the University of California.

University of California, S. F.

The first unit of the San Francisco medical center to be completed is the Radioactivity Center, a small four-story unit placed in operation early in January. All radioactive materials that come to the San Francisco campus will pass through the laboratory. Administered by the deans of medicine, dentistry and pharmacy, the Center will provide facilities for handling, purifying and measuring isotopes as well as storage space and space for individual investigators, with the use of specialized equipment and the aid of the specially trained staff.

The Medical Center's 70,000,000 volt medical synchrotron was placed in operation on January 11. The new synchrotron is the most powerful x-ray apparatus in the world designed for research in cancer. To mark the unveiling of the new installation, a scientific program was held on the evening of January 11 with Dean *Francis S. Smyth* presiding. Speakers included Dr. *Ernest W. Goodpasture*, vice-chairman of the AEC advisory committee for biology and medicine, Dr. *Shields Warren*, director of the AEC division of biology and medicine, Dr. *Robert S. Stone*, director of the Radiological Laboratory and Dr. *Gail D. Adams*, associate director of the laboratory.

Dr. *Ernest Linwood Walker*, retired professor of tropical medicine, died at his home on January 19. He was 81 years old. Dr. Walker was noted for his work on amebic dysentery and Hansen's disease.

Professor *M. J. Dallemagne* of the University of Liege, Belgium, gave talks on January 24 and 25 at the Medical Center. Professor Dallemagne, visiting the United States under the auspices of the Josiah Macy, Jr. Foundation, spoke on "The Biochemistry of Bone" and "The

Mechanisms of Inhibition of the Neuro-muscular Transmission".

A portrait of Dr. *LeRoy C. Abbott,* professor and chairman of the division of orthopedic surgery, has been hung in Toland Hall. It is a gift to the school from his many friends and associates.

Chicago Medical School

Six lectures on various aspects of cancer investigation and treatment were given at the school during January and February. The first lecture, entitled "Recent Biochemical Studies in Carcinogenesis" was given by Dr. *Elizabeth Miller,* biochemist at the University of Wisconsin Medical School on January 16. Subsequent lectures included a talk on "Environmental Cancer Hazards" by Dr. *W. C. Hueper,* chief of the cancerigenic studies section, cancer control branch, USPHS, and a discussion of "Chemotherapy of Cancer" by Dr. *Chester Southam* of the Memorial Center for Cancer and Allied Diseases of New York City.

Dr. *Paul Hurwitz,* assistant professor of ophthalmology, will conduct research on new drugs used in treatment of eye infections. The work is made possible by a grant of $2,400 from Ciba Pharmaceutical Products, Inc.

A gift of $1,500 from the Bernice Kozin Memorial Foundation will be used to buy books on cancer research. The collection will be known as the Bernice Kozin Memorial Cancer Library.

University of Chicago

The Argonne Cancer Research Hospital, a $2,578,650 unit, is nearing completion and will be opened sometime in the spring. Dr. *Lowell T. Coggeshall* will be the director. Drs. *Leon O. Jacobson* and *Robert Hasterlick* will be associate directors, in charge of various aspects of operation and liaison. In addition to the hospital's research quarters, 58 beds will be provided for patients needing treatment with radiant energy. The new equipment will include a betatron, a synchrocyclotron and x-ray therapy equipment.

Dr. *George V. LeRoy* has been named associate dean of the division of biological sciences to replace Dr. *Arthur C. Bachmeyer* who recently retired. Dr. LeRoy was consultant to Los Alamos Scientific Laboratory at the University of California.

Dr. *Edith L. Potter,* associate professor of pathology in the department of obstetrics and gynecology, has the received the 4th annual Dr. Elizabeth Blackwell citation for outstanding work in medicine. She was one of five women doctors upon whom the honor was conferred.

Dr. *Dallas B. Phemister,* Thomas D. Jones professor of surgery and founder of the school's department of surgery, died on December 28 at Billings Hospital. He was 69 years old.

Dr. *R. Levine,* professorial lecturer, department of physiology, and director of metabolic and endocrine research, Medical Research Institute, was the guest speaker on February 17 before the Post-Graduate Alumni Allergy Society of New York Post-Graduate Medical School. Dr. Levine spoke on "Recent Experiences in the Use of Cortisone and ACTH with Remarks on the Effect of Cortisone on Tissue Elements".

Chancellor *Lawrence A. Kimpton; Samuel K. Allison,* director of the Institute for Nuclear Studies; *Cyril S. Smith,* director of the Institute for the Study of Metals; and *John U. Nef,* chairman of the committee on social thought, were the four signers of a letter of protest sent recently to Secretary of State *Dean Acheson.* The letter urged amendment of the McCarran subversive activities control act, on the grounds that it had barred a number of eminent scientists from the United States.

University of Cincinnati

Dr. *B. Noland Carter,* head of the department of surgery, will resign September 1, 1952. He will also relinquish his related position as chief of surgery at Cincinnati General and Children's Hospitals. Dr. Carter joined the faculty in 1922 and has headed the department since 1946.

An $86,300 grant from the March of Dimes will enable a research team from the department of pediatrics to continue studies on biological and chemical factors influencing susceptibility to paralytic polio. Dr. *Albert B. Sabin,* professor of research pediatrics, will direct the study assisted by Drs. *Arnold Fieldsteel* and *Johan Winsser,* both of the Children's Hospital Research Foundation staff.

Dr. *Charles K. W. Ascher,* assistant professor of ophthalmology, has received a grant of $23,488 from the United States Surgeon General to support research on glaucoma. The project is financed through 1954.

It is reported that the 'bedside donor' plan set up in the Dayton, Ohio VA hospital in 1949 by Dr. *Paul I. Hoxworth,* director of the School of Medicine's blood transfusion service, has resulted in a net saving during that period of nearly $200,000. Dr. Hoxworth, assistant professor of surgery, instituted the same plan in use in Cincinnati for 13 years and now being followed in 18 hospitals. The basis of the plan is that friends, relatives and business associates contribute blood, either to replace that used by specific patients or to build up the reserve supply, thus eliminating the need for professional donors.

Dr. *Arch I. Carson*, professor emeritus of surgery, died on December 20 at the age of 87. Before his retirement in 1938 he had been an active member of the faculty of medicine for 41 years.

University of Colorado

Starting February 20 and continuing through March 26, the Office of Graduate and Postgraduate Medical Education is conducting a series of 12 lectures for general practitioners in Cheyenne, Wyoming. The lectures are being co-sponsored by the Wyoming chapter of the American Academy of General Practice and are approved by the chapter for 12 hours of credit. The course, one of seven planned by the School of Medicine for the winter and spring of 1952, is the first ever given outside of Colorado. Each Wednesday evening during the series, two lectures are scheduled. All of the lecturers, in addition to being faculty members, are in active practice. The course was planned to constitute a practical review for general practitioners.

A three day postgraduate course entitled "Poliomyelitis and Other Childhood Diseases with Respiratory Dysfunction" was conducted January 17-19 in Sabin Amphitheatre. Twenty members of the faculty acted as instructors. Guest speakers included Dr. *James L. Whittenberger*, professor and head of the department of physiology, Harvard School of Public Health; Dr. *John Adriani*, director of anesthesiology at Charity Hospital, New Orleans; and Dr. *James L. Wilson*, professor of pediatrics and communicable diseases, University of Michigan.

Dr. *Fred Kern Jr.* has been appointed director of the General Medical Clinic at Denver General Hospital, with the academic rank of assistant professor of preventive medicine and public health. Dr. Kern was formerly director of personnel health service at New York Hospital. The General Medical Clinic, financed by a Commonwealth Fund grant of $264,912, will replace the outpatient department and gradually replace the present home care system. Its purpose will be to demonstrate the practice of good general medicine.

Five courses, extending from March through June, have been planned in the expanding program of postgraduate education. The first of these, internal medicine for general practitioners, will be given March 20-22 with Dr. *Gordon Meiklejohn*, head of the department of medicine, in charge. On April 10-12 a course in gynecology, obstetrics, and related problems of the newborn will feature four guest lecturers in addition to the regular staff. A review of diagnosis and management of polio patients, May 1-3, and a course in traumatic and emergency surgery, May 19-20, are also included in the schedule. The final course of the series, psychiatry for general practitioners, will be given June 26-28. Guest lecturer for the course will be Dr. *William T. Shanahan*, professor of psychiatry, University of Texas.

Columbia University

A separate department of anesthesiology has been established at the College of Physicians and Surgeons with Dr. *Emanuel M. Papper*, professor of anesthesiology, as its head. The department will have a faculty of 13 and will continue to give a minimum of 18 hours of instruction to undergraduate medical students.

Dr. *E. Dwight Barnett* has been appointed the first director of the Institute of Administrative Medicine. Dr. Barnett has been director of Harper Hospital in Detroit.

Charles P. Cooper, president of Presbyterian Hospital, in the hospital's annual report, declared that Presbyterian's total of patients in 1951 makes it "the largest of all voluntary hospitals in the country". According to the report, the hospital provided care for 32,636 inpatients, many of whom were treated free or at charges below published rates. Ward patients received the equivalent of 71,417 days of care and 102,519 clinic visits were made. A total of $13,549,000 was spent by the hospital to provide care for inpatients and for the 380,445 visits made to the outpatient department. This sum, according to the report, was $1,114,000 above last year's costs.

Income from patients totaled $8,838,000. Other sources of income were $2,243,000 of investment income from endowments, $630,000 from gifts and contributions and $1,670,000 supplied from such sources as special funds for research. The deficit for the year was $168,000, one-third less than in 1950.

On January 31 an agreement, retroactive to January 1, was signed affiliating Columbia University, Presbyterian Hospital and the Institute for the Crippled and Disabled. The three institutions will undertake a comprehensive program of care, readjustment and job placement for the handicapped, with complete integration of resources. As part of the new program a department of physical medicine and rehabilitation was established at Columbia and an independent physical medicine and rehabilitation service was created in Presbyterian Hospital. Dr. *Robert C. Darling*, who became chairman of the Institute's medical board on January 1, also becomes head of the new department at Columbia and the new service at Presbyterian. The signers of the agreement were *Charles P. Cooper*, president of Presbyterian Hospital; *Bruce Barton*, president of the Institute; and *Joseph Campbell*, treasurer of the University. *Jeremiah Milbank*,

philanthropist, who founded the Institute in 1917, was presented with the pen used by the signers as a memento of the occasion.

Tuition fees at Columbia will rise for all full-time students next fall. Medical and dental students will pay $825 instead of the present annual tuition of $750. Other students will pay $750 instead of $600. University authorities said that the action had been taken "with great reluctance", but deemed it essential to the enduring interests of the university.

Cornell University

A new 12 story student residence hall will be built directly opposite the entrance of the Medical College with the goal for completion set for early in 1954. To be named F. W. Olin Hall, the construction is being made possible by a gift of $2,549,000 from the Olin Foundation, Inc., of New York City. Announcement of the gift, third largest in the history of the college, was made at a formal convocation of faculty and students on January 9. *Charles L. Horn*, president of the foundation, made the announcement. The gift was accepted for the university by *Neal Dow Becker*, chairman of the Cornell board of trustees. Other speakers included *Deane W. Malott*, president of the university; Dr. *Connie M. Guion*, representing the medical faculty; and Dr. *Preston A. Wade*, representing the medical alumni. When completed, the new building will contain 275 rooms, 250 intended for students and the remainder for guests. The ground floor will be devoted to meeting rooms, lounge and office space.

Deane W. Malott, president of the University, told 600 alumni on February 7 that an effort was being made to obtain increased financial support from business and industry, through a recently organized 'corporation committee'. President Malott also told the group that of 325 corporations he had recently studied, 40% indicated they were giving funds for educational purposes while others were considering means to do so. Mr. Mallott explained that the new committee would try to get financial help "from industries and business enterprises which are convinced that they can strengthen America by strengthening its colleges and universities in a time of urgent financial need."

Dr. *Foster Kennedy*, professor of neurology and attending neurologist at New York Hospital, died on January 7 at Bellevue. He was 67 years old.

Emory University

A grant of $7,000,000 toward the endowment of a graduate school has been made to the university by the General Education Board, an affiliate of the Rockefeller Foundation. The gift is payable in units of $1,000,000 over a ten-year period toward a $40,000,000 development program for the university. The institution is to raise $33,000,000. In announcing the donation, *Chester I. Barnard*, president of the General Education Board, said it was made because of Emory's stature as a university, its leadership, community support and geographical location.

George Washington University

Dr. *Robert George McCorkle Jr.* has been named the year's outstanding surgical house doctor at the George Washington University Hospital by a secret vote of fellow interns and resident physicians. In recognition he will receive a trip to the institution of his choice with expenses paid by a fund composed of donations. Dr. McCorkle plans to visit Massachusetts General Hospital and the Lahey Clinic where he will examine facilities for thoracic surgery and research, his chosen field. A graduate of Baylor College of Medicine in 1946, Dr. McCorkle came to University Hospital in July 1949 as a resident in surgery.

Hahnemann Medical College

The Langbord Virus Laboratory is being established under the direction of Dr. *Amedeo Bondi*, professor and head of the department of bacteriology. An initial gift of $10,000 from friends of Dr. *Joseph Langbord*, medical director of the Sidney Hillman Center of Philadelphia, made the laboratory possible.

At a recent meeting of the Pennsylvania Public Health Association, Dr. *Pascal F. Lucchesi*, professor and head of the department of public health was awarded a certificate for meritorious service in the field of public health in Pennsylvania during 1951.

Dr. *Benjamin K. Fletcher*, professor emeritus of pediatrics, died on December 17 at Hahnemann Hospital. He was 83 years old.

Recent grants received:

U. S. Public Health Service, $26,000 renewal grant for undergraduate teaching of cancer and $10,000 to the department of oncology for the purchase of equipment useful in oncologic teaching services.

Wyeth, Incorporated, $3,000 additional grant to the division of medicine for research on blood sulphonomide levels under Dr. *Otto H. Janton*.

Smith, Kline and French Laboratories, $1,900 initial grant for a study of "Neo-penil".

Mennen Company, $1,000 to the division of pediatrics for additional research on one of their products.

Anna M. and Charles J. White Research Fund, $1,000 additional contribution to the division of biochemistry.

Harvard Medical School

Brig. Gen *James Stevens Simmons*, U.S.A. (retired), dean of the School of Public Health, was in Liberia recently where he delivered an address on January 11 at the dedication of the Liberian Institute of the American Foundation for Tropical Medicine. The Institute is an outgrowth of a 1944-45 investigation of disease by the foundation and the Harvard School of Public Health and Medical School. *Harvey S. Firestone Jr.*, board chairman of the Firestone Tire & Rubber Company, created a $250,000 fund to establish the Institute as a memorial to his father. The Republic of Liberia gave the land. Other speakers at the dedication included Mr. Firestone, President *W. V. S. Tubman* of Liberia and Dr. *Joseph N. Togba*, director of public health and sanitation of Liberia and a 1949 graduate of the School of Public Health.

The institute is designed for research in diseases of man and domestic animals in the tropics. Fifty major industries are contributing to its support and its operations will be supervised by at least 10 leading university medical schools.

Dr. *Walter B. Lancaster* died on December 9 at the age of 88. An 1889 graduate of Harvard Medical School, he taught at the school for 53 years.

A series of seminars sponsored by the laboratory of physical chemistry related to medicine and public health, begun on February 7, will continue through March 28 on a once-weekly basis. The schedule for the remaining four sessions includes "Studies on the Structure, Properties and Reactivity of Steroids" on March 13, with Dr. *Thomas F. Gallagher*, Sloan-Kettering Institute for Cancer Research, and Dr. *Richard B. Turner*, assistant professor of chemistry, Rice Institute, and on March 20 Dr. *Vincent du-Vigneaud*, professor of biochemistry, Cornell Medical College, will discuss "Studies on the Hormones of the Posterior Pituitary". The final two sessions, on March 27 and 28, will have as guests Dr. *Waldo E. Cohn*, Oak Ridge National Laboratory, and Dr. *Shields Warren*, professor of pathology at New England Deaconess Hospital.

Howard University

Dr. *Milton J. E. Senn*, head of the department of pediatrics and director of the Center for Child Study at Yale, was a guest of the department of pediatrics on January 18. Dr. Senn spoke at a faculty luncheon on "Current Trends in Medical Education". Later he addressed the junior and senior students on "The Emotional Aspects of Child Care".

University of Illinois

New construction now nearing completion has increased the investment in the 305 acre Medical Center District on Chicago's near west side to $155 million, according to Dr. *Walter H. Theobald*, president of the Medical Center Commission. Less than five years ago the combined value of institutional properties in the district was estimated at $100 million.

Present facilities in the Medical Center include three medical schools, two dental schools, two schools of nursing, a school of pharmacy, a graduate college, a postgraduate school of medicine, a school of mortuary science, three hospitals and five research institutes and laboratories.

Nine new projects are currently under construction or have been recently placed in operation. These include a 500 bed VA hospital and a VA regional office building, which will house a staff of more than 2,000 persons, the 15 story Cook County Interns and Residents Dormitory, the 16 story Presbyterian Hospital School of Nursing, the 489 bed Chicago State Tuberculosis Sanitarium, the 411 bed addition to the University of Illinois Research and Educational Hospitals, the Medical Center Steam Plant, already in operation, the Cook County Graduate School of Medicine, the University of Illinois staff apartment building and the University of Illinois Student Residence Hall. Two additional projects slated for construction early this year are the new East Unit of the Dentistry-Medicine-Pharmacy Building at the University, and the Residential Unit for Mentally Ill Children.

Contemplated future projects for the Medical Center are the Stritch School of Medicine and the Dental School of Loyola University, including a teaching hospital, a research institute and a student residence; Chicago Medical School, including its teaching hospital and research laboratory; and the new East Pavilion of Presbyterian Hospital.

In the plan drawing stage are nine other projects all to be used for research and teaching purposes, providing facilities for study of various specialties. When completed the Medical Center District will represent an investment of $300 million in land, buildings, equipment and endowment.

Based upon a plan for orderly development first adopted in 1942 and since expanded, the district will be surrounded by a 50 acre park belt quiet zone. The periphery, a block wide strip along the east, west and south boundaries, will be used for housing and for commercial services. The northern boundary will be formed by the new Congress Street Expressway, which will provide a means of rapid transportation to the entire metropolitan area.

Dr. *Max Sadove*, head of the department of anesthesiology, was elected organizing president of the Walter Reed Society at the first official meeting of the group held recently in Los Angeles. The society, sponsored by the National Society for Medical Research, is composed of those who have served as "human guinea pigs" in medical research or experimentation under the direction of a qualified scientist. Other officers elected at the meeting were Dr. *Clinton H. Thienes*, head of the department of pharmacology and toxicology at the University of Southern California, vice-president; Dr. *Lloyd L. Seager*, head of the University of Arkansas department of physiology and pharmacology, vice-president; Dr. *John P. McGovern*, chief of the outpatient department of Children's Hospital, Washington, D. C., vice-president; and Miss *Betty Jenney*, research associate, University of Illinois, secretary-treasurer.

Dr. *William Saphir* has been appointed clinical assistant professor of medicine. Two other members of the faculty were promoted from instructor to assistant professor. They are Dr. *Edwin A. Ohler*, in physiology, and Dr. *Harry M. Segenreich*, to clinical assistant professor in psychiatry.

The department of preventive medicine has been merged with the department of medicine in action by the board of trustees. The merger created a division of preventive medicine in the department of medicine on recommendation of a committee of the faculty, with the approval of Dean *Stanley W. Olson* and Dr. *A. C. Ivy*.

Indiana University

Members of the Indiana University Alumni Advisory Committee paid their first official visit to the Medical Center campus on December 8, with morning and afternoon sessions. Dr. *John D. Van Nuys*, dean of the School of Medicine, and Dr. *Maynard K. Hine*, dean of the School of Dentistry, met with the committee.

Psychosomatic Forums are being held the first Monday of each month. Contributors have been Dr. *T. F. Schlaegel*, Dr. *Philip F. D. Seitz*, Dr. *Ralph Reitan* and Dr. *Louis W. Nie*.

Dr. *Versa V. Cole*, associate professor of pharmacology, accepted an appointment to the department of pharmacology at the Army Medical Center, Belle Air, Maryland. Dr. *Amos C. Michael*, associate professor of general pathology, resigned to accept appointment as associate professor of pathology at the University of South Dakota School of Medicine.

A twelve-member Medical Science Building Planning Committee met for the first time on January 1, with Deans Van Nuys and Hine as exofficio members. The much discussed building will, when completed, relieve badly congested classroom and laboratory facilities. Planning of the building was made possible by an appropriation of $125,000 authorized by the Indiana General Assembly in its 1951 session.

Beginning January 1, patient care in the University hospitals began to be charged on the standard system of the basic rate, as in 95 per cent of other hospitals. Prior to that time the hospitals had been charging an inclusive rate, which covered all services needed by the patient, regardless of their number and kind. The new rates range from $9.00 per day for ward patients and $11.50 per day for semi-private patients, to $14.00 per day for private patients. At the same time, the University hospitals installed a card-o-plate system for handling patient records. The system, similar to the one used by department stores for charge account customers, makes it possible to stamp all requisitions and other forms without chance of mistake and with a considerable saving of time for physicians, nurses and technicians.

State University of Iowa

The new VA Hospital on campus was scheduled to admit its first patients about March 1. Dedication ceremonies are tentatively scheduled for March 16. The 500 bed, 13 story building will be operated by a Deans Committee which has been active since the first of the year. Besides providing increased opportunities for resident training and clinical clerkships, services provided will include a department of medical illustration and a radioisotope laboratory.

The Central Scientific Fund of the Medical Services Plan recently granted $39,918 to 19 faculty members to carry out research projects. The fund is a financial pool used solely to support teaching and research activities. Its source is departmental funds derived from private practice in University Hospitals.

Dr. *J. R. Porter*, head of the department of bacteriology, has been named editor of the *Journal of Bacteriology*, official publication of the Society of American Bacteriologists. Dr. *Robert S. Duff* has been appointed visiting assistant professor in physiology, terminating September 1. Dr. Duff had been a research fellow of the Sherrington School of Physiology, St. Thomas' Hospital and the University of London. *W. B. Schoenbohm*, director of the Iowa Hospital-School for Severely Handicapped Children, has resigned effective June 1 to become executive director of the Minnesota Society for Crippled Children. He has been working since January 1 on a half-time basis with the Minnesota society.

The Iowa State Board of Education recently approved plans whereby senior medical students will be required to serve a one month precept-

orship with private Iowa general practitioners. It is expected that the plan will go into operation in June and will count as an extra month in the senior curriculum, but with no increase in tuition.

Recent grants: $4,000 from Mead, Johnson and Company, for continuing nutrition research under Dr. *P. C. Jeans*, pediatrics. $2,700 from the National Council to Combat Blindness, Inc., to Dr. *Herman Burian*, ophthalmology, for research on amblyopia. $1,125 from Flint, Eaton and Company, research on Ceanothyn under Dr. *H. M. Hines*, physiology. $1,500 from Endo Products, Inc., study of the effect of slowly absorbed tubocurarine upon the need for analgesic drugs, under Dr. *E. G. Gross*, pharmacology. $3,000 from Nutrilite Products, Inc., for two months of clinical research under Dr. *William B. Bean*, medicine. $2,400 from the Research Fund of the Supreme Council of Scottish Rite of Freemasonry, Northern Masonic Jurisdiction of the U.S.A., for research in psychiatry under Dr. *Jacques S. Gottlieb*.

Jefferson Medical College

Dr. *S. Dale Spotts*, member of the surgical staff at Jefferson Hospital and instructor in surgery, died on February 1 at the age of 56. Dr. Spotts was chief of surgery and president of the medical board at Philadelphia General Hospital.

University of Kansas

In the last year the School of Medicine received $757,267.51 in gifts and grants for research from sources other than the Kansas legislature. The Medical Center is now training 414 medical students, 174 nursing students, 95 residents and interns, 23 technicians, 11 physical therapists, 13 occupational therapists, 4 dietitians and 2 social workers.

Dr. *Otto Loewi*, research professor in pharmacology, New York University College of Medicine, will deliver the 19th Annual Porter Lectures, a series of three, on March 31 and April 1. Dr. Loewi's topics will include "Problems in the Field of Adrenal Function", "From the Workshop of Discoveries", and a talk on "The Mechanism of Drug Action". He will also deliver a talk to students at the Medical Center called "Reflections on the Study of Medicine".

The National Heart Institute has awarded a fellowship for one year beginning January 1, 1952 to Dr. *T. K. Lin*. Dr. Lin will work in the cardiovascular laboratory under the direction of Dr. *E. Grey Dimond*. A special 5 day postgraduate course dealing with all phases of electrocardiography will be held from March 10 through 15. Four guest lecturers are to be included on the program for the course.

Kansas Medical Day was observed at the Medical Center on March 7. The purpose of the day, sponsored jointly with the State Medical Society, is to give students many helpful and practical pointers on the practice of medicine, and to show them the advantages and opportunities for practicing in Kansas.

Dr. *Cyril V. Black*, Pratt, Kansas, spent the month of January at the Medical Center in postgraduate training in surgery, under the recently developed in-residence program. Dr. *M. E. Christmann*, Dr. Black's partner in Pratt, spent the month of February under the in-residence program taking postgraduate work in orthopedic surgery.

Marquette University

Dr. *Percy F. Swindle*, professor and director of the department of physiology, is retiring as head of the department on July 1 to devote more time to research. He will be succeeded by Dr. *James J. Smith*, former dean of the medical school at Loyola University, and recently chief of the education division of the department of medicine and surgery at the VA central office in Washington, D. C. Dr. Swindle will continue as an active member of the department.

Dr. *Harry K. Ihrig*, research professor in biophysics on the faculty of the university graduate school, and vice-president in charge of research for Allis-Chalmers Manufacturing Company, has been elected a new member of the medical school board of directors.

The Milwaukee Division of the American Cancer Society has awarded a $25,000 grant for research on leukemia. Dr. *Anthony V. Pisciotta*, presently working in Boston under Dr. *William Damashek*, has been chosen to head the project. He will devote full time to the research beginning July 1, at Milwaukee County General Hospital.

Dr. *David A. Cleveland*, professor and director of the division of neurosurgery, was in charge of the recent series of Schlitz lectures held in the medical school auditorium. Speakers included Dr. *James Gardner*, Cleveland, Ohio; Dr. *Collin S. MacCarty*, Mayo Clinic; Dr. *Leonard T. Furlow*, Washington University, Saint Louis; and Dr. *Loyal Davis*, Northwestern University.

Medical school alumni have set their annual spring clinic for March 29, at the school. Wisconsin physicians are invited to attend the program of lectures and discussions on medical topics.

University of Maryland

Dr. *Frank H. J. Figge*, professor of anatomy, received a grant of $7,600 from the American Cancer Society, Maryland Division Fund, to support research now in progress.

College of Medical Evangelists

The Postgraduate Assembly and Convention, sponsored by the alumni association, was held in Los Angeles March 2-4, followed by a series of short courses in the various specialties, March 5-7. Guest speakers at the assembly included Dr. *Lester R. Dragstedt*, University of Chicago professor of surgery; Dr. *George F. Lull*, secretary and general manager of the AMA; and Dr. *Walter C. Alvarez*. Also attending were Dr. *Harold Wolff*, Cornell Medical College, and Maj. Gen. *George Armstrong*, surgeon general, U. S. Army.

Harold Ermshar, business manager of the Los Angeles campus, has been selected general business manager for the College. Ermshar will be responsible directly to President Macpherson for the financial operation of the entire institution. Other financial news includes notice from comptroller *John Shull* that, during the past two years, CME has been 96 percent self-supporting. Eighty percent of this income came from CME-operated hospitals. Mr. *Leon Roberson*, manager of the student loan fund, reports that the total fund now constitutes $337,-224, most of which is outstanding. Roberson, calling for an increase in the total amount of the fund, pointed out the fact that a long time elapses before student loanees begin to repay the money advanced to them during their student days.

Vice-president *Fred Norwood*, now on leave with the W. K. Kellogg Foundation, returns to the campus in June to coordinate and direct public relations functions.

Dr. *Mervyn Hardinge* returned to the Loma Linda campus after a five month stay at the Harvard School of Public Health. Dr. *Guy Hunt* has completed a two year neurology fellowship in Los Angeles. Dr. *Robert Woods* has joined the department of bacteriology to develop biophysics.

Dr. *Webster Prince*, a Detroit dentist, was named dean of the proposed School of Dentistry by the board of trustees on January 31. The School of Dentistry will constitute the eighth unit of the College of Medical Evangelists.

Erection of a $325,000 library-administration building on the Loma Linda campus is under way. When completed, the new building will house 60,000 volumes and provide office space for the president, deans, registrar and public relations officer.

University of Michigan

Three awards were presented by the Michigan Health Council at the 5th Annual Michigan Rural Health Conference, held at the university on January 11 and 12. The Livingston County Health Council received an award for the outstanding community health project in 1951. *Jack Pickering*, of the Detroit Times, was honored for writing on behalf of better health, and the magazine *Inside Michigan* received an award for establishing "a new and vital public forum to further understandings essential to the health and civic progress of a free people."

Another feature of the conference was a Court of Public Appraisal, in which five defendants, representing as many areas of responsibility for Michigan's health, delivered testimony. The defendants were Dr. *J. K. Altland*, Michigan Department of Public Health; Dr. *A. C. Furstenberg*, dean of the School of Medicine; Dr. *Warren B. Cooksey*, representing voluntary health associations; Dr. *L. F. Foster*, representing private physicians; and Mrs. *Margaret Price* of Ann Arbor, as spokesman for health consumers.

The Michigan Foundation for Medical and Health Education, Inc., sponsored the conference with 94 co-sponsors, including the university and the Michigan Health Council.

University of Minnesota

Dr. *Robert B. Howard* has been appointed director of continuation medical education to succeed Dr. *George N. Aagaard*, who has assumed his duties as dean of Southwestern Medical School.

Dr. *Owen H. Wangensteen*, professor and head of the department of surgery, attended the quarterly meeting of the surgical study section of the U. S. Public Health Service on January 9 and 10. Dr. Wangensteen is chairman of the section. On January 12 and 13 he attended dedication ceremonies for the new 9 story addition to the Buffalo (New York) General Hospital, where he spoke on "The Role of Research in the Modern Voluntary Teaching Hospital". His itinerary also included a meeting of the committee on growth of the National Research Council in Washington, D. C., and a meeting in Chicago of the regents of the American College of Surgeons.

Dr. *E. H. Rynearson*, of the Mayo Foundation, will serve as one of the visiting faculty members for the March 24-26 continuation course in therapeutics for general practitioners, to be given at the Center for Continuation Study. The course will take up the treatment of gastrointestinal conditions, certain household poisons, and the management of acute and chronic alcoholism. One-half day will be devoted to psychotherapy and a half-day will be given to problems of peripheral vascular disease.

The continuation course in surgery on April 7-9, primarily intended for general practitioners, is principally concerned with pediatric surgery. Dr. *Robert E. Gross*, Ladd professor of children's

surgery, Harvard Medical School, is guest speaker. Dr. Gross will also deliver the annual George E. Fahr lecture on April 8. His subject is "Coarctation of the Aorta".

Dr. *Garnet W. Ault,* professor of proctology, Georgetown University School of Medicine, will be visiting faculty member for the continuation course in proctology to be given April 14-19. Dr. *O. H. Wangensteen,* chairman of the department of surgery, and Dr. *Walter A. Fansler,* director of the division of proctology, will direct the course.

Emphasis will be placed on infectious diseases in the April 21-22 continuation course in pediatrics, intended primarily for pediatricians. Dr. *John M. Adams,* professor of pediatrics, University of California at Los Angeles, will be visiting faculty member for the course. Dr. Adams will also deliver the annual Clarence M. Jackson lecture, his topic being "Respiratory Diseases—Changing Concepts".

A course in obstetrics for specialists is being held April 17-19. Dr. *S. M. R. Reynolds,* physiologist, department of embryology, Carnegie Institution of Washington, Baltimore, Maryland, will be guest lecturer. Dr. Reynolds will also deliver the annual Duluth Clinic lecture, April 18, on the topic "Newer Concepts of Fetal Circulation".

New York University

The William J. Wollman Foundation announced on February 3 that it would contribute $1,000,000 for the Children's Pavilion in the new building planned for University Hospital. The hospital construction is planned to start within a year or two; it will be the largest of an eventual half-dozen major structures in the New York University-Bellevue Medical Center. The only major building completed thus far is the Institute of Physical Medicine and Rehabilitation. The Children's Pavilion will occupy the eighteenth floor, with its own entrance. It will have 60 beds and outpatient facilities.

Dr. *Anthony J. Lanza,* chairman of the industrial medicine department of the Post Graduate Medical School, and Dr. *S. Bernard Wortis,* chairman of the department of psychiatry and neurology of the College of Medicine, are jointly in charge of a new alcoholism clinic placed in operation on February 4. Dr. *A. Z. Pfeffer* will be physician-in-charge of the permanent staff of medical and psychiatric specialists. The purpose of the clinic is to treat problem drinkers employed in local New York City industries. It is expected that a large part of the expenses will be covered by case fees paid by companies employing the patients. The Consolidated Edison Company has agreed to underwrite up to $25,000 of the first year's expenses.

Dr. *Jerome W. Conn* gave, on February 1, the annual Sigmund Pollitzer Lecture, sponsored by the Post-Graduate Medical School. Dr. Conn, professor of internal medicine and director of the division of endocrinology and metabolism of the University of Michigan Medical School, spoke on "The Influence of Adrenal Cortical Activity upon the Electrolyte Composition of Thermal Sweat".

Dr. *Jules Redish,* assistant professor of medicine, died on January 18. He was 41 years old.

State University of New York—Brooklyn

The January 1952 *Newsletter* of the State University is devoted to medical education, with articles contributed by, among others, Dr. *Carlyle Jacobsen,* executive dean for medical education, and Dr. *William R. Willard,* dean of the medical center at Syracuse. The *Newsletter* is, in fact, a well produced brochure explaining the reason why medical education is an important need for the nation. Written for intelligent laymen, the articles explain how the need for more doctors is being met, and how practicing physicians are helped by the existence of post-graduate programs.

Dr. *Jean A. Curran,* dean of the State University Medical Center at New York, has been elected chairman of the New York Committee on the Study of Hospital Internships and Residencies. Dr. *Frode Jensen,* associate dean at Columbia College of Physicians and Surgeons, has been elected secretary and Dr. *Dayton J. Edwards,* Cornell Medical College, was named treasurer.

Dr. *William Samuel Carlson* assumes his new duties as president of the State University on April 1. Dr. Carlson resigned from his position as president of the University of Vermont to accept the post. He succeeds Dr. *Alvin C. Eurich,* who resigned to become affiliated with the Ford Foundation. *Charles Garside,* acting president and member of the board of trustees, will continue his duties until April.

State University of New York—Syracuse

Dr. *Henry H. Haft,* clinical professor of medicine, died on January 23 in Syracuse. He was 60 years old.

Northwestern University

Dr. *Richard H. Young,* dean, was a general chairman of the International Conference on Vitamins and Metabolism, held in Havana, Cuba on January 25. The conference was sponsored by the University of Havana School of Medicine and the Fundacion de Investigaciones Medicas

and was held in the General Calixto Garcia Hospital in Havana. Dr. *Tom D. Spies,* Dr. *Robert E. Stone* and Dr. *Samuel Dreizen,* all of Northwestern, presented the results of their clinical studies of tropical sprue at the conference.

The Quartermaster Division of the Army has granted $40,000 to the department of biochemistry. The grant will be used to extend investigations in edema and dehydration being carried on in cooperation with the research service at VA Hospital, Hines, Illinois, and the Army's Climactic Research Laboratory, Lawrence, Massachusetts. The main interest of the project is to determine the physiological effects of extreme climactic conditions on body water distribution.

Promotions: To professor and acting chairman, Dr. *Benjamin Boshes,* nervous and mental diseases. To associate professor, Dr. *Fred Merrifield,* surgery. To assistant professor, Dr. *Reinhold Benesch,* biochemistry; Dr. *Nathan N. Crohn,* surgery; Dr. *Paul Szanto,* pathology. To associate, Dr. *George C. Turner,* medicine.

Appointments: Assistant professor, Dr. *George M. Landau,* radiology. Associate, Dr. *Lee G. Sewall,* nervous and mental diseases.

University of Oregon

The first course in the winter series of postgraduate courses for general practitioners was a review of obstetrical problems on January 28-30. Other winter courses include applied therapeutics, February 18-22, and general surgery, March 10-14. The spring series of courses will include ophthalmology and otolaryngology, March 24-28; pediatrics, May 12-16; and electrocardiography, May 19-23.

Dr. *John E. Harris,* assistant professor of ophthalmology, has been named associate editor of the Archives of Ophthalmology of the AMA. He will prepare and edit annual reviews in the basic sciences in his field.

Dr. *Warren C. Hunter,* professor and head of the department of pathology, will work on cancer research made possible by a $6,000 grant from the Damon Runyon Memorial Fund.

The request for steel allocations for the new $6,000,000 general hospital has been submitted to the National Production Authority. If approved, construction is scheduled to begin this spring.

Dr. *Daniel C. Labby,* department of medicine, spent the month of February touring medical installations. He visited the University of Michigan Medical School, the Peter Bent Brigham Hospital, Massachusetts General Hospital, and various medical centers in New York City. His tour was for the purpose of observing and studying medical trends and was supported by an A. Blaine Brower scholarship granted by the committee on fellowships and awards of the board of regents of the American College of Physicians.

Dr. *Edward S. West,* professor of medicine, has been appointed chairman of the Borden Award committee of the Association of American Medical Colleges. The Borden Award is given annually to the person making the greatest contribution within the past five years in the medical sciences.

An "open house" at the University of Oregon Medical School for returning alumni will be one of the feature attractions of the thirty-seventh annual Medical School Alumni Association's three-day meeting to be held May 7, 8 and 9 in Portland.

Association president Dr. *Roderick E. Begg* said that alumni will be conducted on campus tours by senior medical students. This year's meeting will be held in conjunction with the Sommer Memorial Lectures made possible by a perpetual endowment fund of the late Dr. *Ernst H. Sommer* and will bring outstanding speakers in the medical profession to Portland. The entire program is under the direction of Dr. *Merl L. Margason.*

An electronic stethoscope, one of the first ten distributed in the United States, was put into operation the first of February at the Medical School. Called a Cambridge Educational Electronic Cardioscope, it is used to teach medical students the characteristics of the sound that comes from the lung and heart of a patient, with up to 200 students simultaneously listening through individual electronic stethoscope microphones.

A discoverer of one of the "B" vitamins, Dr. *Roger J. Williams,* was guest speaker at the Portland Academy of Medicine meeting at the Medical School in early February. Dr. Williams is professor of chemistry and director of the Biochemical Institute at the University of Texas.

Speaker for a postgraduate course in applied therapeutics at the Medical School February 18-22 was Dr. *Albert M. Snell,* of the Palo Alto Clinic, California.

Dr. *Norman A. David,* professor and head of the department of pharmacology, was presiding officer over the Western Society for Clinical Research meeting at Carmel, California in January. New president elected was Dr. *Hans Hecht* of Salt Lake City.

University of Pennsylvania

The "Doctor-in-Training" program, now in its third year at the School of Medicine, will be assisted for the next two years by annual grants of $22,500 from the Commonwealth Fund of New York. Under the program, a de-

scription of which was published in the January issue of MEDICAL EDUCATION, students are assigned to individual families in Philadelphia area homes in the first year of their medical education. From then until graduation they serve as family health advisors with close faculty supervision, assuming gradually increased responsibility for the medical and related problems of their assigned families. The program is administered jointly by the department of public health and preventive medicine and the department of psychiatry, with the assistance of personnel of the university hospital and the hospital's social service department. At present there are 80 students participating in the plan. The Commonwealth gift will enable university sponsors to enlarge and improve the entire scope of operational field of the program.

Undergraduates in the School of Medicine have established a new organization known as The General Practice Society, which, since its inception last year, has become the largest student society on campus. Originally conceived by members of the Family Health Advisor group in 1950, the new organization reasserts the traditional ideals of the family doctor and emphasizes the basic role of the general practitioner as the keystone of the medical profession. There are already more than 75 active members who meet monthly to hear speakers, see appropriate motion pictures and listen to panel experts discuss such subjects as "The History of General Practice in America" and the "Organization of American Medicine". Membership is open to all undergraduates at the medical school.

On January 22, under the auspices of the Strecker Psychiatric Society, a symposium was held on the topic "Psychiatry: Art or Science". Dr. *Isaac Starr,* Hartzell research professor of therapeutics and former dean, delivered the formal address on the subject. Afterward the subject was discussed by Dr. *Edward A. Strecker,* professor of psychiatry, and Dr. *William T. Lhamon,* associate professor of psychiatry and associate in medicine.

A grant of $8,200 from the Damon Runyon Memorial Fund has been made to allow continuation of cellular investigations in the department of physiological chemistry. Dr. *D. Wright Wilson,* Benjamin Rush professor and chairman of the department, is directing the research with the assistance of Dr. *John M. Buchanan,* associate professor of physiological chemistry.

A traveling fellowship of $1,000 to be contributed annually and to be known as the Dr. I. S. Ravdin Traveling Fellowship has been established as the gift of Dr. *Francis J. Halford,* class of 1926, who is now affiliated with five Honolulu hospitals.

University of Pittsburgh

Dr. *Thomas Parran,* dean of the Graduate School of Public Health, told a national conference on January 24 that chronological age was deficient as an index for retirement. Dr. Parran was one of a group of 75 representatives of industry, medicine, labor and education who met at Arden House in Harriman, New York for a three day conference on retirement under the sponsorship of the McGregor Fund of Detroit and the national committee on aging of the National Social Welfare Assembly.

He told the conference that age 65 was "an accident of social policy" and that as a result of its general acceptance as an index, the country was losing the potential labor of 1,500,000 persons who could earn $4,500,000,000 annually. The conference was told that the population now included 12,000,000 persons age 65 or over, of whom only 3,000,000 were now in the labor force. In the next 30 years this group would increase to 14,000,000 persons, with an increasing percentage available for employment.

The participants at the opening session of the conference were in general agreement that the practice of retirement at 65 represented an arbitrary decision, but industry spokesmen contended that continued employment of older workers was not administratively convenient and not economically feasible if competitors were not forced to bear equal costs.

Saint Louis University

Dr. *Melvin A. Casberg,* dean, has been appointed vice-chairman of the Armed Forces Medical Policy Council. He will serve as the principal assistant to the chairman, Dr. *W. Randolph Lovelace.* The council advises the Secretary of Defense on medical and health matters. Other members of the council include *James Hollers,* D.D.S., San Antonio; Dr. *I. S. Ravdin,* University of Pennsylvania professor of surgery; Dr. *Alfred R. Shands,* surgeon-in-chief of the Alfred I. duPont Institute, Children's Hospital, Wilmington, Delaware; and the three armed forces surgeons general.

University of Southern California

Dr. *George C. Griffith,* department of medicine, has been appointed a member of the assembly of the American Heart Association and a member of the committee on education. Grants for research under his direction have been received as follows: $2,400, Wyeth, Inc.; $18,215, Los Angeles Heart Association; $3,600, G. D. Searle & Co.; $3,600, Squibb Institute; and $1,000, *Maxwell Kunin.*

Recent promotions: To associate clinical professor; Dr. *J. Walter Wilson,* dermatology and

syphilology; Dr. *Alfred M. McCausland*, obstetrics and gynecology. To assistant clinical professor; Dr. *Seymour L. Cole*, medicine; Dr. *Ben L. Bryant*, otorhinolaryngology.

Recent appointments: Associate professor; Dr. *Arne N. Wick*, physiology; Dr. *Wilbur C. Thomas*, pathology; Dr. *Samuel I. Joseph*, anesthesiology. Assistant professor; Dr. *William R. Bergren*, biochemistry; Dr. *Milton L. Lewis*, medical microbiology. Instructor; Drs. *Paul Kotin* and *Lewis A. Palmer Jr.*, pathology; Dr. *Boris Catz*, medicine; Dr. *Floyd Miracle*, pediatrics; Drs. *William C. LaForge* and *Herbert J. Movius II*, surgery; Drs. *John L. Danielson* and *James R. Horst*, orthopedic surgery; Dr. *Gilbert M. Nunez*, proctology.

University of South Dakota

Dr. *Amos C. Michael*, formerly on the staff of the University of Indiana School of Medicine, has accepted appointment as associate professor of pathology.

Dr. *Walter L. Hard*, professor of anatomy, has been appointed acting dean of the School of Medicine to replace Dr. *Donald Slaughter*.

Dr. *Earl B. Scott*, department of anatomy, and Dr. *Charles Schwartz*, department of biochemistry, are principal investigators in a study of the histological effects of amino acid deficiencies, financed by a renewal grant of $4,400 from the U. S. Public Health Service.

Arrangements have been made for *Stanley Rosenthal*, an Atomic Energy Commission fellow, to complete work for his Ph.D. degree under Dr. *Charles D. Cox*, head of the department of microbiology.

Southwestern Medical School

At its meeting on February 1 and 2, the board of regents of the University of Texas approved preliminary plans for a $2,750,000 basic science building, to be the first unit on the medical school's permanent campus. It is expected that the building may be completed by the summer of 1953. A request for funds for a clinical building will be presented to the next state legislature.

Dean *George N. Aagaard* participated in the Congress on Medical Education and Licensure in Chicago on February 10-12. He discussed "Some Fundamentals of Postgraduate Education for the Physician" at the regular session and appeared on a special television program relating to postgraduate education. While in Chicago, Dr. Aagaard also attended a meeting of the Committee on Medical Motion Pictures of the AMA.

Dr. *Jacob Furth*, chief of the pathology-physiology section of the division of biology, Oak Ridge National Laboratories, lectured to students and faculty on January 30. His topic was "Neoplasia: Induction in Man and Animals by X-Ray, Gamma Rays, and Radioactive Substances".

Research under the direction of Dr. *J. J. Quilligan*, associate professor of pediatrics, on influenza and related virus diseases, has been made possible by a grant of $4,000 from the Caruth Foundation of Dallas. Another Caruth Foundation grant, of $5,000, will be utilized for research under Dr. *S. Eduard Sulkin*, professor and chairman of the department of bacteriology, on mechanisms involved in the control of virus diseases.

Dr. *Arthur Grollman*, professor of experimental medicine, will deliver the Leroy Long Memorial lecture on March 14 at the University of Oklahoma School of Medicine.

Dr. *A. B. Baker*, professor and director of the division of neurology, University of Minnesota Medical School, delivered the annual Phi Chi lecture on January 14. His topic was "The Causes of Death in Polio".

University of Tennessee

L. W. Kibler has been named head of the newly formed department of postgraduate medicine. Mr. Kibler was for 15 years field director of the postgraduate medical education program of the Tennessee State Medical Association. The state association's training program, which will not be affected by the University's plans, will be continued by *George Cummings*, formerly assistant alumni secretary of the University of Oklahoma.

The University program will be tailored to fit the needs of the busy practitioner and will utilize the facilities of the Memphis medical center. First attention will be given to the needs of general practitioners, with programs for specialists and members of related health professions to be included as need warrants and facilities become available.

The Family General Practice Clinic, established in September in the outpatient department of John Gaston Hospital, will receive $53,200 from the Commonwealth Fund of New York to help support its work during the next three and a half years. Designed to demonstrate to students that a family physician can maintain a high standard of medical service in rural areas, the clinic will be provided with a simple diagnostic x-ray unit, facilities for physiotherapy, patient examining rooms and a demonstration examining room for the training of students. In addition, a social worker will be employed to work with the student on social and family factors having a bearing on the patient's illness.

Tuition fees for medical, dental and pharmacy students in the Medical Units will be increased

in July. The increase will amount to $25 per quarter for resident medical and dental students, $18.50 for resident pharmacy students. Out-of-state students will pay an additional $50 per quarter in medicine; $35 in dentistry; and $31 in pharmacy. Dr. *C. E. Brehm*, University president, explained that the new fee schedule was adopted by the executive committee of the board of trustees after a study showed it to be the only possible means of raising additional funds needed to balance the budget of the Medical Units. It is the first increase in fees since 1942. Dr. Brehm also pointed out that the University operates its Medical Units at an average annual cost per medical student of $1,043. The national average is about $2,500.

Dr. *Jack N. Hunt*, senior lecturer in physiology at Guy's Hospital Medical School, London, is engaged in research on the physiology of the digestive tract. With the research group of Dr. *J. P. Quigley*, chief of the division of physiology, Dr. Hunt is here under the auspices of the Rockefeller Foundation.

Dr. *Robert Lewis Bacon* has accepted appointment as associate professor of anatomy. Other recent appointments to the anatomy staff include Dr. *Sidney Arthur Cohn*, Dr. *Lew S. Cunningham* and Dr. *James Sherman Davis*.

University of Texas—Medical Branch

Dr. *Otto A. Bessey* has accepted appointment as professor and chairman of the department of biochemistry and nutrition. Dr. Bessey now serves in a similar position at the University of Illinois College of Medicine.

The first Meyer Bodansky lecture was given on February 13 by Dr. *Carl F. Cori* and Dr. *Gerty T. Cori*, Washington University Medical School. The Coris received the Nobel Prize in 1947 for their contributions on carbohydrate metabolism.

The postgraduate division and department of neuropsychiatry, in cooperation with the Texas Medical Association, presented a review of psychiatry for general practitioners at the Medical Branch, February 4 through 8. Guest speakers included Dr. *Leslie Hohman*, professor of psychiatry, Duke University School of Medicine; Dr. *Joseph Hughes*, professor of psychiatry, Woman's Medical College; Dr. *Russell R. Munroe*, assistant professor of psychiatry, Tulane Medical College; and Dr. *Marion B. Richmond*, Washington, D. C.

Professor *L. Von Bertalanffy*, biologist of the University of Ottawa, lectures at the Medical Branch on March 10-12. His topics will be "Quantitative Laws in Metabolism, Growth and Morphogenesis", "The System Concept in Biology", and "Dynamic Models in Psychology".

Research under the direction of Dr. *John G. Bieri*, associate professor of biochemistry and nutrition, has been made possible by a grant of $3,700 from the Williams-Waterman Fund of the Research Corporation of New York. A grant of $2,500 from the family of *H. H. Weinert*, a former regent of the University of Texas, will support cardiovascular research under Dr. *George Herrmann*, professor of medicine.

Tulane University

Physicians from six southern states convened in New Orleans on February 15-16 for the regional meeting of the American College of Physicians. Dr. *Thomas P. Findley Jr.*, professor of clinical medicine, was director of the meeting and Dr. *Edward D. Matthews*, assistant professor of clinical medicine, was chairman of the program committee. Guests of honor for the banquet on February 15 were *E. R. Loveland*, executive secretary of the College, and Dr. *Maurice C. Pincoffs*, Baltimore, president of the College.

An intensive short course on legal medicine and elements of medico-legal litigation was conducted for trial lawyers of the nation from February 27 to March 4. Directed by Dr. *Hubert Winston Smith*, professor of law and legal medicine, the course is the only one of its kind conducted by a university. With lawyers from all over the nation attending, this year's course was given in two sections, basic and advanced, for the benefit of the 176 lawyers from 35 states who attended last year's basic course. Dr. Smith, director of the course, holds degrees in both medicine and law from Harvard University.

Dr. *Joe Vincent Meigs*, clinical professor of surgery at Harvard Medical School, delivered the 5th annual Rudolph Matas lecture on February 15. His subject was "Treatment of Cancer of the Cervix". Dr. Meigs was introduced by Dr. *Alton Ochsner*, chairman of the department of surgery and president of the American College of Surgeons. In January Dr. Ochsner presented an honorary fellowship into the College to Dr. *Rudolph Matas*, emeritus professor of surgery, at special ceremonies in New Orleans. Dr. Matas was one of the original founders of the American College of Surgeons in 1913. He served as its president in 1925-26, and as vice-president in 1918 and again in 1930.

Two grants, totalling $16,845, have been received from the March of Dimes to further research in poliomyelitis. Dr. *John P. Fox*, professor of epidemiology, will direct a $10,045 project on the disease process and Dr. *Edwin D. Kilbourne*, director of the division of infectious diseases, will supervise the $6,800 study of Coxsackie virus.

Vanderbilt University

Dr. *Henry William Scott Jr.* assumed his duties as professor of surgery and surgeon in chief at Vanderbilt Hospital in January. He succeeded Dr. *Barney Brooks,* now professor emeritus, who continues his affiliation with the medical school. Dr. Scott has been associate professor of surgery at Johns Hopkins, where he had been affiliated since 1946. He received his M.D. degree from Harvard Medical School in 1941. Dr. Brooks recently completed 25 years continuous service on the staff at Vanderbilt.

Dr. *Robert William Quinn,* associate professor of preventive medicine at the University of Wisconsin Medical School has accepted appointment as professor and head of the department of preventive medicine and public health. Dr. Quinn plans to assume his new duties in June 1952. Dr. *Alvin E. Keller,* acting head of the department, will continue as associate professor of preventive medicine and public health.

Medical College of Virginia

When Old Dominion Hospital, 80 beds and gas lighted, opened in 1861 it was the first separately organized hospital for the Medical College of Virginia. In that first year 1,015 officers and soldiers of the Confederacy were cared for "under the direction of the professors of the college" and the budget showed disbursements for, among other things, $63.60 for bells and speaking tubes for hospital; $24.54 for a gutter for the new stable; and $2.94 for 23 pounds of rope for digging a sink.

Today there are three hospital units accommodating 860 patients in all, and a total of 25 buildings on the 20-acre campus devoted to teaching, research and care of the sick. In the past year over 283,500 patient days of treatment were given. There were 11,618 patients admitted from the city of Richmond, 9,183 more from other parts of Virginia and 819 from other states. The remaining 4,100 admissions of the total of 25,820 were newborn infants. During the past year one out of every 20 citizens of Richmond were cared for in MCV hospitals.

The facts given above and many others are found in the annual report of the Hospital Division, Medical College of Virginia, 1950-51. Beautifully produced, the report is a painstaking effort to humanize what is usually a dull document. Simplified graphs and charts present the story of an average day at the hospitals, the increase in admissions, the expanding emergency room service, and numerous other topics. Especially interesting is the fact that the report does not neglect medical education while pointing with pride at service. A special section is devoted to the important job done, as a teaching hospital, in preparing future doctors for service to the community.

University of Virginia

The Nemours Foundation of Wilmington, Delaware has allotted $9,800 to the University Hospital for the care of crippled children during 1952. An additional $1,500 was allotted to the speech and hearing clinic. These gifts are a phase of the Foundation's program for crippled children under which $39,000 has been distributed in Virginia for the current year.

Dr. *Edward Valentine Jones* has been appointed assistant professor of neurology and psychiatry, to be responsible for the encephalography laboratories. Dr. Jones was formerly an instructor in neurology at the University of Michigan.

Washington University

Dr. *Robert A. Moore,* dean of the School of Medicine, left on February 12 for Bangkok, Thailand. As director of the Washington University-Thailand medical schools teaching assistance program, Dr. Moore will spend 28 days delivering lectures in pathology and observing results of the exchange program thus far.

The School of Medicine became the first school in the nation to establish a cooperative teaching program under the Marshall Plan when the project was set up last April. At that time the ECA made a two year grant-in-aid of $200,000 to support the undertaking, which is designed to help raise Thailand's standard of health care and health education. The program includes an exchange of physicians, nurses, medical technicians and nurse anesthetists. In effect, Washington University has "adopted" Sitiraj Medical and Nursing School and the Chulalongkorn Hospital and Nursing School, Thailand's two health education centers. Eight faculty members from the American school are now in residence in Bangkok, while 22 present or future members of the Thai faculties have enrolled at Washington University to learn more of their specialties, American methods of teaching, and the practice of medicine in the United States.

Wayne University

The 1st annual symposium on disorders of the blood was held on January 19 with Dr. *Paul A. Owren,* professor of medicine at the University of Oslo, Norway, as guest of honor. Dr. Owren is noted for his work on new clotting factors of the blood. Two Fulbright exchange students, Dr. *P. de Nicola,* University of Pavia, Italy, and Miss *Norma Alkjaersig,* Biological Institute of the Carlsberg Foundation, Copenhagen, Denmark, were among the more than

20 who delivered papers. Chairman for the conference was Dr. *Walter H. Seegers,* professor of physiology at Wayne.

Dr. *Benjamin M. Spock,* professor of child development in the departments of pediatrics and psychiatry, University of Pittsburgh Medical School, was the second speaker in the annual series of Leo M. Franklin lectures in human relations. Dr. Spock's topic on January 17 was "Securing Healthy Growth for Our Youth".

A new course in industrial bacteriology, designed especially to service Detroit industries, is being offered by the University during the spring semester. Dr. *John Ehrlich,* head of antibiotic and mycological research at Parke, Davis and Company and Dr. *Alice K. Bicknell,* assistant professor of bacteriology, are conducting the course. Dr. *C. O. Christensen,* Difco Laboratories, is special lecturer.

University of Wisconsin

The Easter Seal Cerebral Palsy center opened on January 2, supported by a grant providing $15,000 per year for three years from the Wisconsin Association for the Disabled. Dr. *Henry I. Okagaki,* of the University hospitals orthopedics department, will be directly in charge of center activities. The center will be located in the orthopedic hospital and its functioning will be assisted by a 16 member advisory committee, of which Dr. *Mabel G. Masten* is chairman. Among the staff will be occupational, physical and speech therapists and a social worker. Dr. *Clinton N. Woolsey,* Charles Sumner Slichter professor of neurophysiology, is in charge of the center's research program. This will be financed by a three year grant of $15,000 per year from the Alfred Laukhuff trust.

Formal dedication ceremonies for the new Cancer Research Hospital were held on January 23. Dr. *Leonard Scheele,* surgeon general of USPHS, was the principal speaker.

On January 28 Dr. *Harold G. Wolff,* of Cornell Medical College and New York Hospital, delivered a lecture on "Headache Mechanisms". The lecture was sponsored by the Medical School Society.

Dr. *Harry D. Bouman,* professor of physical medicine, was named editor of a new medical journal entitled "The American Journal of Physical Medicine". First issue of the journal was scheduled for February, with Williams and Wilkins Company, Baltimore, as publishers.

Yale University

Dr. *Francis Gilman Blake,* civil director of Army Medical Research and former dean of the School of Medicine, died on February 1 at Walter Reed Hospital in Washington, D. C. He was 64 years old. Dr. Blake was a member of the faculty for 30 years and, at the time of his appointment in 1921, was one of the youngest men ever to have been named to a full professorship at Yale. He had been on leave of absence from his teaching duties to carry out his work with the Army, and was to have retired in June. Only five days before, on January 26, his successor as chairman of the department of internal medicine was announced by the provost of the University. It was Dr. *Paul B. Beeson,* who was named Ensign professor of medicine and physician-in-charge in the Grace-New Haven Community Hospital. Dr. Beeson had been chairman of the department of medicine at Emory University School of Medicine since 1946.

A marriage counseling clinic will open in the spring, under the joint auspices of the departments of psychiatry and obstetrics and gynecology. Dr. *Theodore Lidz,* professor of psychiatry, will assist Dr. *Frederick C. Redlich,* chairman of the department of psychiatry, in that aspect of the program. Dr. Redlich emphasized that the service would be for "normal" people as well as those with emotional problems, and that pre-marital counseling would also be provided. In some cases the new program will support the work of the infertility clinic, now its 5th year of successful operation.

Dr. *Jose Manuel Rodriguez Delgado,* research fellow in physiology, was notified on February 1 that he is the winner of the 1952 Ramon y Cajal prize, the Spanish government's highest scientific award. On leave from the University of Madrid since 1950 to work at Yale, Dr. Delgado won the prize for his paper on a new technique for brain study.

Finances are not the only problem in increasing our supply of doctors, according to *Albert F. Wessen,* a sociologist who was recently appointed to a special internship in pediatrics at the School of Medicine. Speaking on the weekly radio program "Yale Interprets the News" over WTIC, Hartford, Connecticut, he said, "Modern medicine is so complex that 'mass instruction' is an impossibility. In many ways, medical education is essentially an apprentice-type of training."

Wessen noted that a basic obstacle to increasing medical school enrollment lies in the shortage of competent teachers, many of whom are engaged in research or have been lured away by the higher incomes of private practice. He also pointed to the growing concern for preventive medicine and extended psychiatric care as increases in service which the medical profession feels are necessary.

The belief that there is no real doctor shortage fails to account for the difference between specialist and general practitioner, according to Mr.

Wessen. He noted that the number of general practitioners has decreased while the number of urban specialists has increased. "Reshuffling is not the answer nor is the establishment of additional medical schools," Wessen said. "Medical schools cost money to build and money to operate. Moreover, the quality of instruction must be maintained."

* *

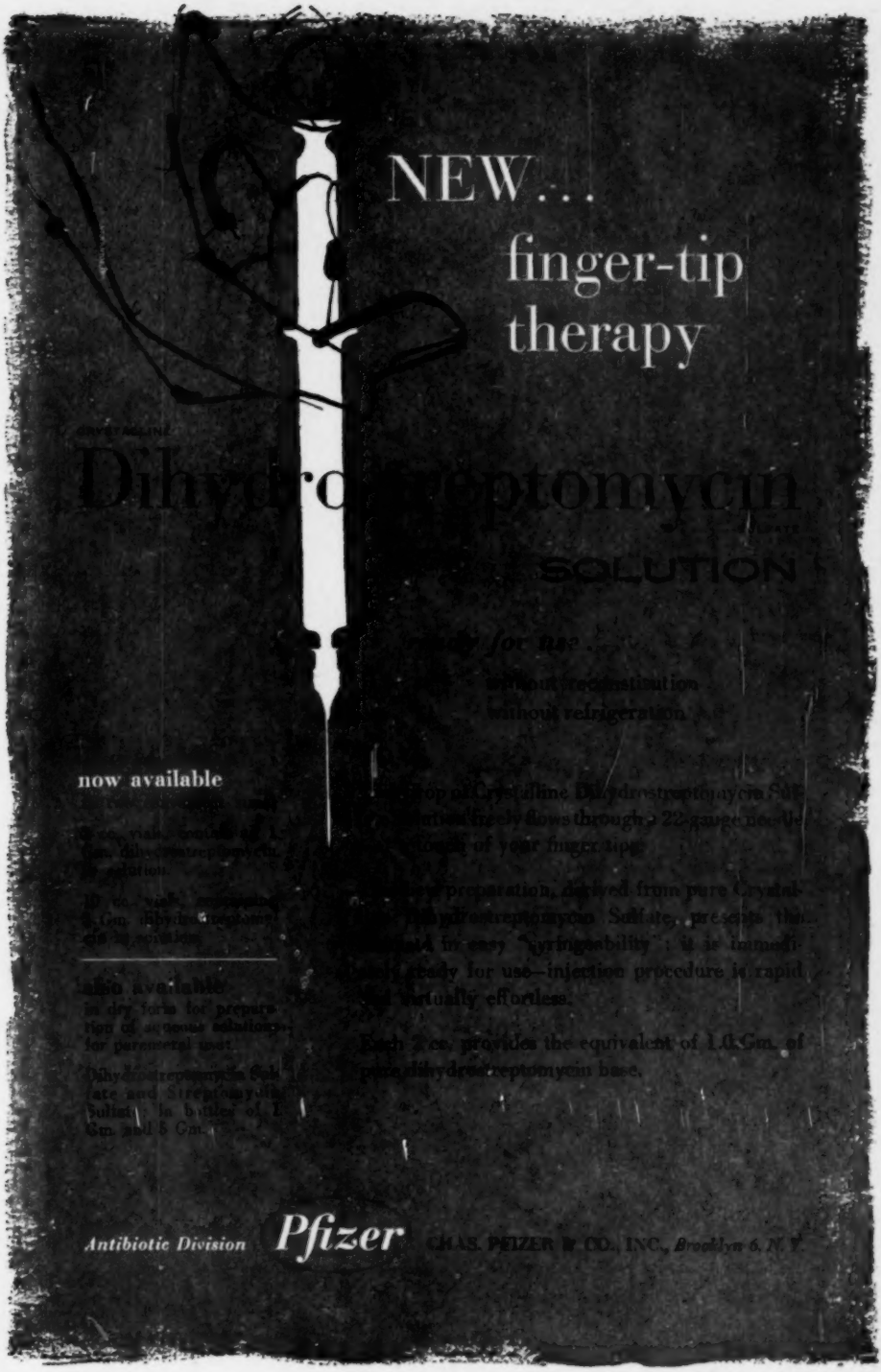
Yeshiva University

On January 3 Dr. *Harry M. Zimmerman*, professor of pathology at Columbia College of Physicians and Surgeons and chief of the laboratory division of Montefiore Hospital, was appointed director of the Yeshiva University Medical School. A week later New York State Attorney General *Nathaniel L. Goldstein* was named to head the drive to obtain $10,000,000 in funds for the new school. On January 28 Yeshiva University authorities acquired at public auction from the city of New York the remaining parcels of land they required to round out the site of the proposed school. If the fund raising campaign is successful and current plans can be carried out, the first class will be admitted in the autumn of 1953. It is expected to number 100 students, chosen on a non-sectarian basis.

On January 18 Dr. Zimmerman, who is continuing his duties at Montefiore Hospital, outlined some of his plans for the new curriculum. Utilizing the fact that the school will be adjacent to and using the facilities of the $36,500,000 Bronx Municipal Hospital Center, an attempt will be made to incorporate clinical teaching almost from the first day the student enters medical school. Dr. Zimmerman also feels that the clinical subjects should be taught in conjunction with the basic sciences, giving the preclinical student a view of the "whole man". Particular attention will be paid to the socio-economic impacts of medicine. Practical experience will be provided on the effects of family income levels and housing developments on community health. Home care programs will come in for their share of attention, especially in regard to geriatrics and chronic diseases.

Other aspects of what Dr. Zimmerman called the seven neglected aspects of medical teaching include an organized course in ethics and the exploratory study of the voluntary types of group medical practice. Still another departure of the new curriculum is in the distribution of clock-hours assigned to various subjects. A downward revision from the traditional will be tried at the outset so that time may be found for the shifting needs in teaching. Four years of eleven months each will be required to complete the course of study.

The final interesting aspect of the plan submitted by Dr. Zimmerman, is the creation of a center for preventive and legal medicine. One of the problems to be studied in the field of preventive medicine will be that of accident hazards and how they may be overcome. With a 'courthouse' being built in the Bronx Hospital, regular sessions will be held which will involve various phases of medico-legal education.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